



# INSTRUMENTS & TOOLS CATALOGUE

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Major Tech was founded in 1992 with its focus on developing its own brand of Test & Measuring instruments, a first for South Africa. From its humble beginnings Major Tech has become synonymous with innovation and quality throughout its product range. Major Tech is heavily committed to product research and allocates significant resources to an ongoing research program.

This type of investment ensures that Major Tech is constantly at the forefront of technological development and these new ideas and concepts can rapidly be brought to market. The success of Major Tech and our experience in developing unique products assisted the company in developing meters and test tools for South African electricians, but in recent years we now attract customers from all over the globe. Our focus is to ensure that we meet the latest IEC safety standards while still delivering testers with unique features and functions at an affordable price. Major Tech was one of the first companies worldwide to introduce double injection housings for test meters in the early 2000's and have now included this durable housing wherever possible throughout our range.

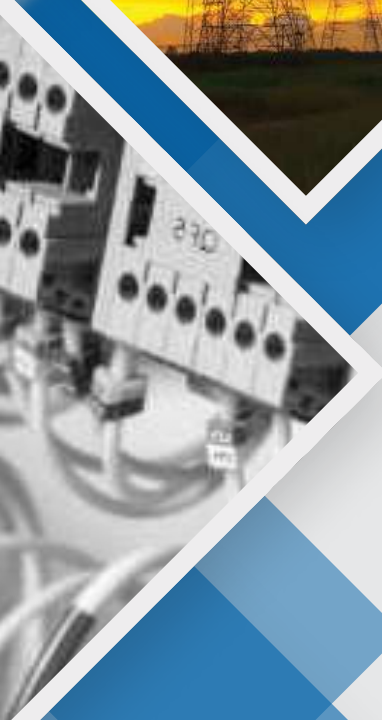
Our ever-popular MT1800 Series multimeters were developed with IP67 waterproof housings especially for mining applications and arduous areas. Due to the enhancement of the Solar Industry and the growth of this new energy, DC testing requirements have become more of a necessity than a preference. Major Tech have recently upgraded the MT1885 and MT1887 to measure 1500V DC plus the added feature of Bluetooth. With technological advancements, we are excited to introduce the MT784, a thermal imaging clamp meter, measuring 1500V DC with Bluetooth 4.0 technology. For the solar industry, the MT782 clamp meter and recently upgraded MT785 Harmonic and Power clamp meter both with Bluetooth 4.0 technology, have been developed to measure 1500V DC.

Infrared (IR) thermometers has been a focal point for Major Tech for many years, but as technology changes we have found the need to introduce Infrared Thermal Imaging to the range. In recent years we have developed a range of Thermal Imagers to meet the needs of all customers. Recently introduced is the low cost MTi11 Thermal Imager which meets the needs of the independent electrician, helping solve possible problems in DB boards and connections. Our advanced Thermal Imaging and DMM technology has allowed us to introduce the MT2005, a combined Digital Multimeter & Thermal Imager with the added benefit of Bluetooth transmission for fast and accurate image transfers.

Software has become an integral part of measuring tools for users, and in recent times we have introduced Bluetooth to many of our meters, allowing data and measurements to be transmitted to the free App for both iOS and Android devices. The Bluetooth function is available for some DMM's, Laser Distance Meters, Clamp Meters, Thermal Imagers and Environmental Meters.

Major Tech is celebrating 30 years of service to the South African market in 2022 where our name and history has been proven in ensuring total customer satisfaction.

We look forward to you continually experiencing Major Tech's quality, enthusiasm and service.







## CONTENTS

Meterbox Software	2
IP67 & IEC CAT Rating Explanation	3
Industrial Applications Diagram	4
Residential Applications Diagram	5
Multimeters	6
Clamp Meters	18
Insulation Testers	33
High Voltage Insulation testers	38
High Voltage Detectors	42
Multifunction Testers	44
Earth Resistance, Loop/PSC Testers	47
Power Analysers	51
Electrical Testers	56
Contractor Test Meter Kits	64
Thermal Imagers	65
Thermometers	73
Environmental Meters	78
Cable Meters	86
Specialist Meters	90
Accessories	95
Application Notes	102
Tools Section	105
Product Index	147





## METERBOX SOFTWARE

The Meterbox-iMM software supports a range of instruments offered by Major Tech by transferring the measured data to the user's smartphone. The easy to use software allows the user to check, export and share recordings and charts via the Cloud.

### Meterbox-iMM Software permits/functions:

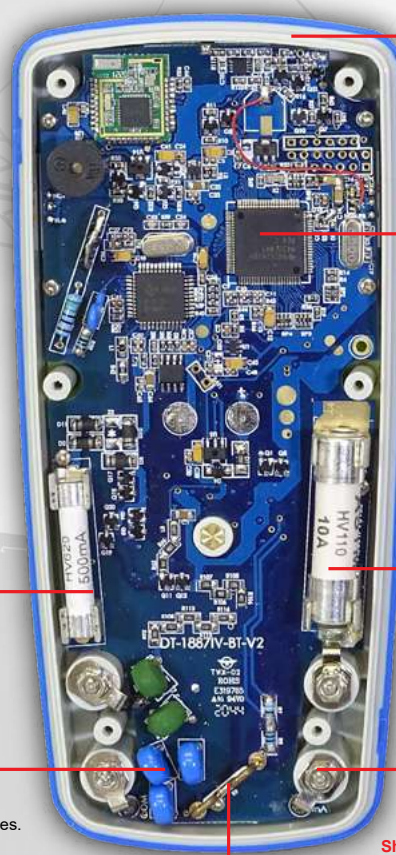
- Measuring data transferred to Cloud
- Edit, analyze & store the data
- Connecting with iPhone/iPod/iPad
- Android Phone/Android Pad Sharing the data with others by E-mail, facebook & twitter
- Trend capture
- Cloud backup





# How do I choose an instrument that will keep me and my electricians safe?

## Understanding the components of a safe meter



**IP67 O.Ring**  
Sealed for waterproof and dust proof

Repairable circuitry, multiple component

10x38 Fast Blow Fuse

Screwed Terminals with Spring Washers

**Shunt** - Reduces current load in meters, filters out high frequencies, and protect circuits from surges.

High Rupture Ceramic Fuse

**MOV - Metal-Oxide Varistor**  
Control or compensation elements in circuits either to provide optimal operating conditions or to protect against excessive transient voltages.

## Understanding CAT Rating & Transient Voltages



- Primary Supply Source
- Incoming Utility Feed
- Exterior Transformers
- Over Current Protection Devices
- Supply between Meter & Panel

**Phase to Neutral**  
**300V | 600V | 1000V**  
**6000V | 8000V | 12000V**  
**Transient Voltage**



- Fixed primary feeders
- Wiring within buildings
- Bus Bars & Distribution Panels
- Lighting Systems
- Motors with permanent connections

**Phase to Neutral**  
**300V | 600V | 1000V**  
**4000V | 6000V | 8000V**  
**Transient Voltage**



- Non Fixed Power Devices
- Appliances
- Lighting Equipment
- 120V or 240V equipment in a building
- Portable tools

**Phase to Neutral**  
**300V | 600V | 1000V**  
**2500V | 4000V | 6000V**  
**Transient Voltage**



- Electronic Equipment
- Regulated low-voltage sources
- Photo Copiers

IEC NO LONGER SPECIFIES PROTECTION LEVEL FOR CAT I

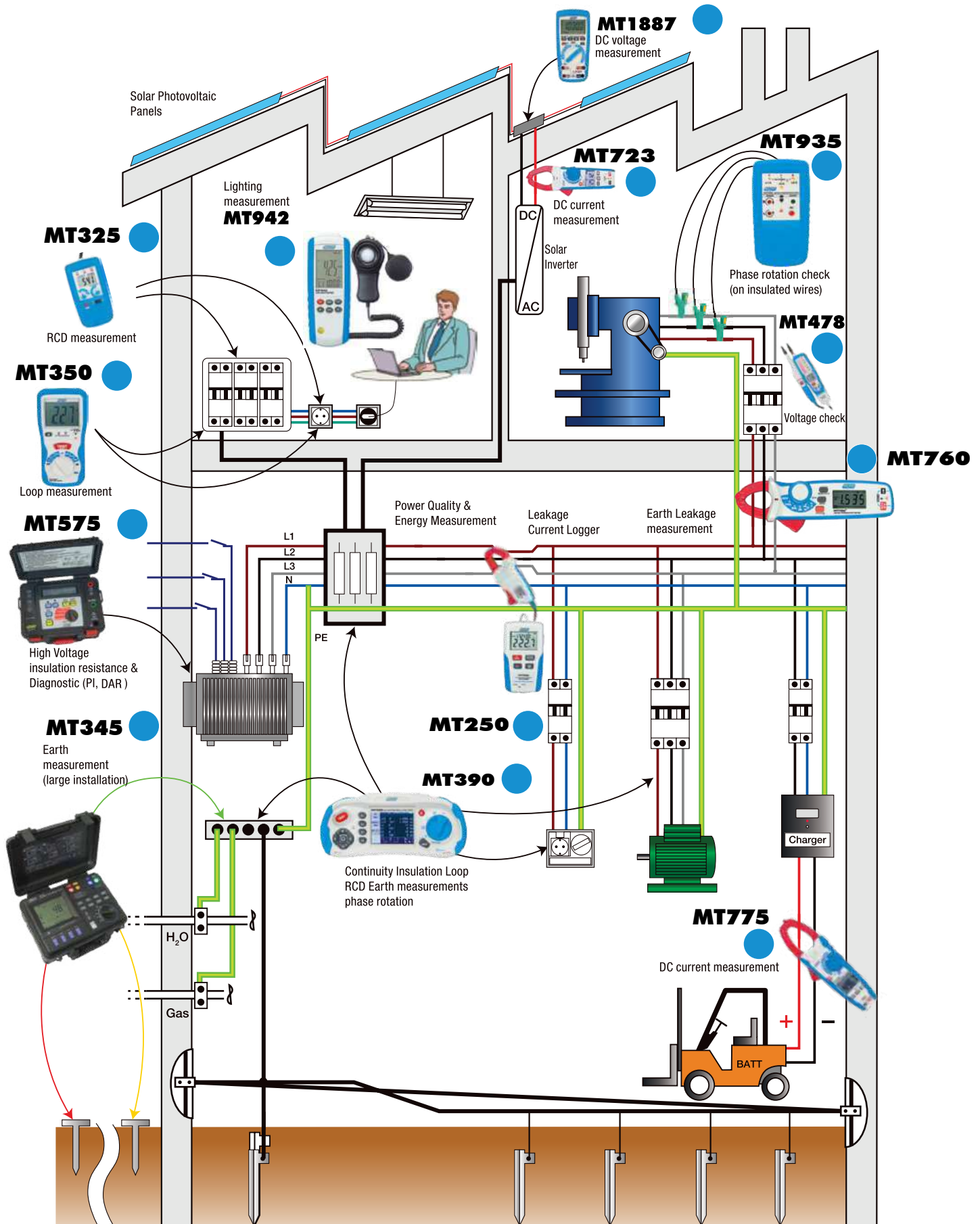
CAT IV

CAT III

CAT II

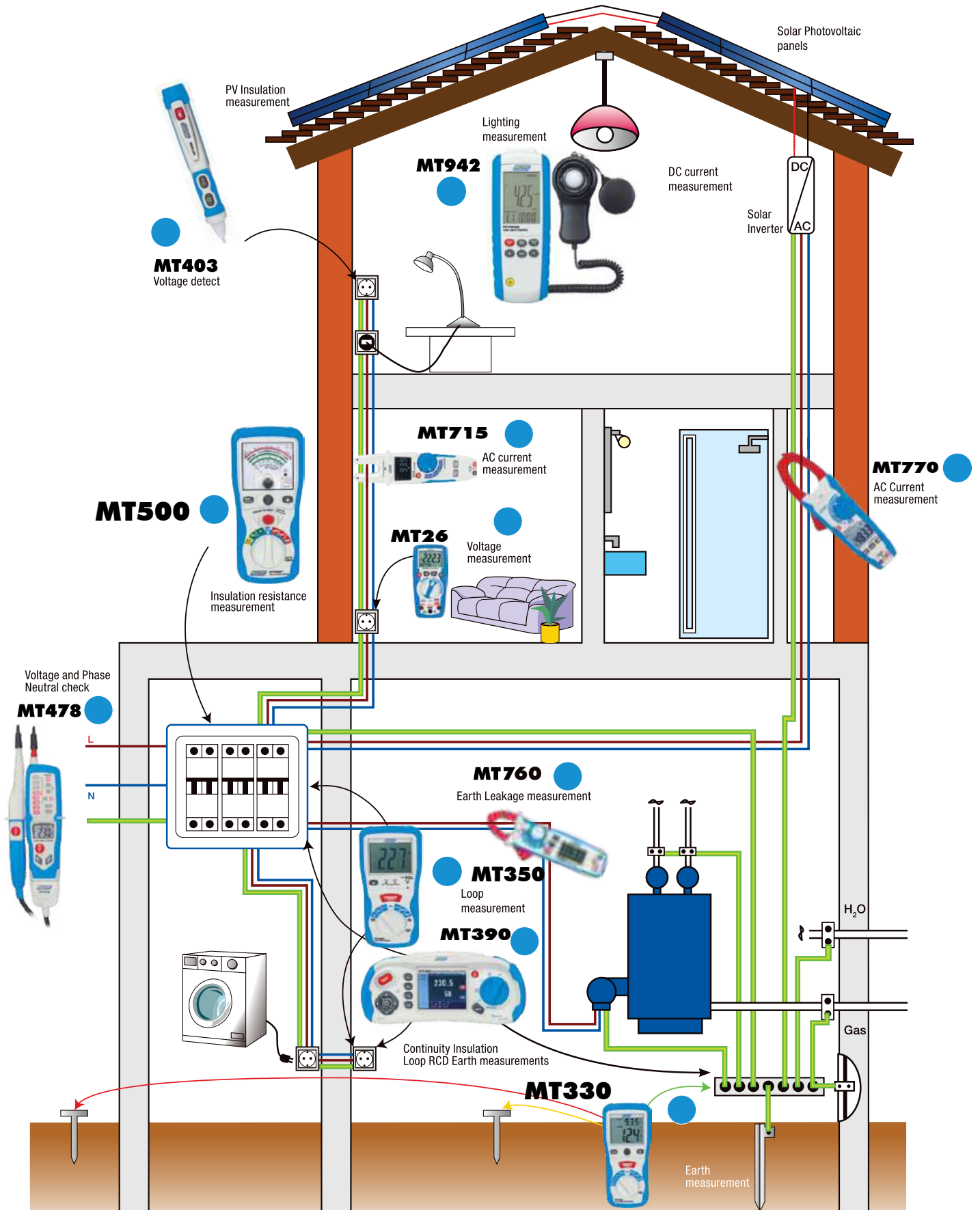
CAT I

## INDUSTRIAL APPLICATIONS





## RESIDENTIAL APPLICATIONS





## MULTIMETERS

### CONTENTS

Thermal Multimeter	7
Insulation Tester & TRMS Multimeter	7
Industrial Multimeters	8
IP67 Industrial Multimeters	9
IP67 Compact Multimeters	12
Compact Multimeters	13
2-in-1 Specialist Multimeter	17



# MULTIMETERS



## THERMAL MULTIMETER



The MT2005 Professional True RMS Industrial Digital Multimeter with a built-in 80 x 80 pixel Thermal Imager, and TFT colour LCD display, providing fast A/D converting sampling time with high accuracy. This CAT IV meter offers full DMM function ranges of ACV and DCV to 1000V, plus AC+DC Trms Voltage, Micro Amps and Amps, Frequency, Resistance, Capacitance and K-Type Temperature measurements. The 2.8-inch TFT colour display provides a clear thermal image with hot, cold and center spot measurements. It is able to differentiate temperatures between -20°C and 260°C in different colour pallet options, and displays amperage on the thermal screen. The unit offers Bluetooth communication and an internal memory to store and transfer information. The Bluetooth app is available on both Android and IOS platforms for viewing, organizing and sharing recordings. The MT2005 is a fast and easy solution providing maximum versatility and a wide range of features for both trouble shooting and preventative maintenance electricians.

### Features

- 6000 count 2.8" TFT Colour LCD display
- Built-in Thermal imager with MIN/MAX
- Temperature Range -20°C to 260°C
- 50Hz fast Thermal image frame rate
- DC Voltage
- AC, AC+DC TRMS Voltage
- DC current
- AC, AC+DC TRMS current
- Resistance and Continuity test
- Diode test
- Capacitance to 6mF
- Frequency to 10MHz
- Duty Cycle
- Temperature with K-type probe
- Flexible coil current

Built-in Infrared Thermal Imager offers you non invasive measurements of potential hot spots. These images can be transferred via Bluetooth to a Smartphone for analysis.

Simply turn on the bluetooth of the smartphone. Press the Thermview+ icon and enter into the home interface, then press the Connect Device icon and the bluetooth device name will appear. Touch the device name listed in Bluetooth devices list to connect to the device.

Phone not included

Function	Range	Accuracy
<b>Imaging and Optical Data</b>		
Field of View	21° x 21°/0.5m	
Spatial resolution (IFOV)	4.53mrad	
Thermal sensitivity/NETD	<0.1°C @ +30°C/100mK	
Image Range	50Hz	
IR Resolution	80 x 80 pixels	
<b>Image Presentation</b>		
Display	2.8" LCD, 240 x 320 pixels	
<b>Measurement</b>		
Temperature range	-20°C to 260°C	±(3°C or ± 3%)
<b>Measurement analysis</b>		
Spot	Center spot	
Automatic detection	Hot or cold markers	
Emmissivity correction	Variable 0.01 to 0.99	
Measurement corrections	Emissivity, reflected temperature	
<b>Communications Interfaces</b>		
<b>Bluetooth BLE</b>		
<b>Multimeter</b>		
DC Voltage	600.0mV - 1000V	±(0.09% +5)
AC Voltage	600.0mV - 1000V	±(0.8% +5)
AC + DC TRMS Voltage	6.000V - 1000V	±(2.4% +20)
DC Current	600.0µA - 10A	±(0.9% +5)
AC Current	600.0µA - 10A	±(0.1.2% + 5)
Duty Cycle	5.0% to 95.0%	±(1.2% +2)
Resistance	600.0Ω - 60MΩ	±(0.5% + 5)
Frequency	40.00Hz - 10MHz	±(0.09% +5)
Capacitance	60.00nF - 6mF	±(1.2% + 8)
Temperature	-40°C to 600°C	±(1.5% + 3)
Digital Display	6000 count 2.8" TFT	
Input impedance	>10MΩ VDC & >10MΩ VAC	
Size	195 x 88 x 58mm	
Weight	540g	
<b>Optional Accessory</b>		
MT740		
Flexi Coil AC Current	30.00A - 3000A	±(0.8% + 5)



MT2005



## INSULATION TESTER & TRMS MULTIMETER



The MT565 is a combination of a True RMS multimeter and an Insulation Continuity tester. The MT565 measures AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle and temperature. The Low pass filter can accurately measure variable frequency drive (VFD) signals. The insulation tester offers 50V, 100V, 250V, 500V, and 1000V ranges with an insulation resistance up to 5000MΩ, DAR and Auto PI functions. The meter has a 50 000 count LCD dual display with an analogue bar graph, and the CAT IV 600V rating ensures the highest level of safety. The unit offers Bluetooth communication and an internal memory to store and transfer information.

### Features

- 50 000 count with analogue bargraph backlit LCD display
- Measures AC and DC voltage up to 1000V
- Measures AC and DC current up to 10A
- 5 insulation test ranges: 50V, 100V, 250V, 500V, 1000V
- Insulation Resistance up to 5GΩ
- Temperature measurement from -50°C to 1200°C
- Capacitance to 10mF
- Frequency to 10MHz
- Low Pass Filter for measurement of variable frequency drive (VFD)
- Peak Hold function for Voltage and Current measurements
- Download stored data to iOS or Android App via Bluetooth
- Continuity buzzer
- Min/Max and Data Hold function
- IP65 double moulded rugged waterproof housing

Function	Range	Accuracy
<b>Insulation</b>		
50V - 2000MΩ	1mA@50kΩ	±(4.0% +5)
100V - 5000MΩ	1mA@100kΩ	±(4.0% +5)
250V - 5000MΩ	1mA@250kΩ	±(3.0% +5)
500V - 5000MΩ	1mA@500kΩ	±(3.0% +5)
1000V - 5000MΩ	1mA@1MΩ	±(4.0% +5)
<b>Low Ohm Meter</b>		
Resistance	0.000Ω - 2000Ω	±(2.0% +5)
Open Circuit Voltage	5.0V	±1V
Measuring Current	200mA	
<b>Multimeter</b>		
DC Voltage	500mV - 1000V	±(0.1% +4)
AC Voltage	500mV - 1000V	±(0.1% +5)
DC Current	500µA - 10A	±(1.0% +3)
AC Current	500µA - 10A	±(1.5% +3)
Resistance	500Ω - 50MΩ	±(0.5% +3)
Frequency	50Hz - 50MHz	±(0.3% +2)
Capacitance	500nF - 5mF	±(3.5% +9)
Temperature	-50°C - 1200°C	±(1.0% +2.5°C)
Size	210 x 97 x 68mm	
Weight	634g	



MT565





MT1005

## INDUSTRIAL DMM



The MT1005 Heavy duty True RMS Industrial Digital Multimeter with TFT colour LCD display, provides fast A/D converting sampling time, high accuracy, built-in data logging and Trend Capture features. It can trace any interruptions of the equipment and record events automatically unattended. Using the Bluetooth feature, it is easy to find and solve the problems while the app creates reports that can be transferred via Email, WhatsApp and other options. This meter provides safer measurements with the double moulded rubber housing design.

### Features

- Large 50 000 count 320 x 240 TFT colour LCD display
- Logging function with Trend Capture for easy review of logged data
- Graph 100 Data review
- Bluetooth interface for easy data transfer & accuracy calibration
- 10kHz bandwidth (voltage/current)
- AC, ACV+DCV True-RMS measurements
- Records events and trends
- Saves measurements
- A/D convert fast sampling time
- Peak capture (records transients as fast as 250µs)
- Min/Max/Average with Time stamp (records signal fluctuations)
- 4-20mA process loop measurements with % reading
- Battery capacity indication
- Date indication
- Meterbox iMM & cloud service

Function	Range	Accuracy
DC Voltage	500mV - 1000V	±(0.05% +5)
AC Voltage	500mV - 1000V	±(0.05% +5)
DC Current	500µA - 10A	±(0.2% +5)
AC Current	500µA - 10A	±(0.8% +5)
Resistance	500Ω - 50MΩ	±(0.2% +5)
Temperature	-200°C to 1350°C	±(1.0% +3)
Capacitance	5nF - 10mF	±(1.5% +8)
Frequency	50Hz - 10MHz	±(0.01% +5)
Size	170 x 79 x 50mm	
Weight	360g	



MT1003

## INDUSTRIAL DMM



The MT1003 Heavy duty True RMS Industrial Digital Multimeter with TFT colour LCD display, provides fast A/D converting sampling time, high accuracy, built-in data logging and Trend Capture features. It can trace any interruptions of the equipment and record events automatically unattended. Using this meter, it is easy to find and solve the problems while the internal memory keeps measurements stored. This meter provides safer measurements with the double moulded rubber housing design.

### Features

- Large 6000 count 320 x 240 TFT colour LCD display
- Logging function with Trend Capture for easy review of logged data
- Graph 100 Data review
- 10kHz bandwidth (voltage/current)
- AC True-RMS measurements
- Setup function & Saves measurements
- A/D convert fast sampling time
- Peak capture (records transients as fast as 500µs)
- Min/Max/Average with Time stamp (records signal fluctuations)
- 4-20mA process loop measurements with % reading

Function	Range	Accuracy
DC Voltage	600mV - 1000V	±(0.1% +5)
AC Voltage	600mV - 1000V	±(0.9% +5)
DC Current	600µA - 10A	±(0.9% +5)
AC Current	600µA - 10A	±(1.2% +5)
Resistance	600Ω - 60MΩ	±(0.8% +5)
Temperature	-40°C to 1350°C	±(1.2% +3)
Capacitance	60nF - 600µmF	±(1.5% +8)
Frequency	60Hz - 10MHz	±(0.09% +5)
Size	170 x 79 x 50mm	
Weight	360g	



## CARRYING CASES

### Features

- Optional carrying case to house a range of meters the user needs to carry at any one time
- Specially designed by Major Tech to be compact with a shoulder strap
- Adjustable compartments for bigger instruments or tools
- Pocket for instruction manuals or documentation
- Size - 220mm (H) x 450mm (W) x 200mm (D)



Registered Design

MTKBAG

### Features

- Optional carrying case for most Digital Multimeters
- Adds extra protection for the meter
- Size - 220mm(H) x 110mm(W) x 60mm(D)



MT827



# IP67 INDUSTRIAL MULTIMETERS



## INDUSTRIAL OSCILLOSCOPE/DMM

This high accuracy True RMS multimeter has a fast sampling time, built-in data logging and Trend Capture features, plus it includes a 10MHz oscilloscope displayed on a colour screen. Using Bluetooth technology the captured data can be transferred to a computer for analysis of the datasheets. The oscilloscope function has a 10MHz bandwidth with a 50MS/s Real Time sample rate and cursors to assist the user with zoom in measurements - all displayed on a colour TFT display! With TFT colour display, this meter enables the user to trace and identify problems on equipment, and with the data logging & Trend Capture functions, it can be utilised as a standalone unit to log events! The meter is housed in a double moulded rubber casing with an IP67 waterproof design.

### Features

- Large 50 000 Count 320 x 240 TFT colour LCD display/ Low pass filter/ IP67 Rating
- 10MHz / 50MS/s Bandwidth/ Real time sample rate
- Logging function with Trend Capture for easy review of logged data
- Bluetooth PC interface for easy data transfer & accuracy calibration
- 100kHz Bandwidth (voltage/current)
- Temperature measurement from -50°C to 1000°C
- AC, AC+ DC, True RMS measurements
- Peak capture (records transients as fast as 250µs)
- Min/Max/Average with Time stamp (records signal fluctuations)
- Motor winding and low ohm (500) measurement range
- The Meterbox software supports bluetooth products transferring the measured data to the customers' smart phone

Function	Range	Accuracy
DC Voltage	50mV - 1000V	±(0.05% +20)
AC Voltage	50mV - 1000V	±(0.3% +25)
AC + DC TRMS Voltage	50mV - 1000V	±(3.5% +25)
AC Current	500µA - 10A	±(0.6% + 25)
AC + DC Current	500µA - 10A	±(1.0% + 25)
Resistance	50Ω - 50MΩ	±(0.5% +20)
Frequency	50Hz - 10MHz	±(0.01% +10)
Capacitance	5nF - 10mF	±(2.0% +40)
Temperature	-50°C to 1000°C	±(1.0% +2.5)
Size	220 x 96 x 60mm	
Weight	631g	



MT1009

## INDUSTRIAL DMM

The MT1007 is a professional True RMS Industrial Multimeter accurately measuring AC/DC voltage and current on complex signals or non-linear loads providing fast A/D converting sample time. This meter gives you 50 000 count resolution with full graphics LCD display with built-in data logging and Trend Capture features. The MT1007 has an Auto Zero and Peak Hold function with calibration mode and measures resistance, continuity, diode, frequency, duty cycle, min/max and average recordings with Time Stamp function to record signal fluctuations.

The MT1007 professional True RMS Industrial Multimeter can trace any interrupted problems of equipment without supervision. This meter plots measurements as a single line to help detect signal anomalies over time and can store up to 10 000 recorded events. The MT1007 can log multiple sessions or log data continuously for over 200 hours, enabling the user to save and name the measurements so it can be recalled at any time.

### Features

- True RMS AC/DC voltage and AC/DC Current measurements
- 50 000 Counts, full graphics LCD display with white backlight
- Measures resistor, diode, capacitance, frequency and duty cycle
- Trend Capture and Bluetooth Interface
- Log multiple sessions or log data continuously for over 200 hours
- Real time clock for automatic time stamping of saved readings
- Min/Max/Average with Time Stamp to record signal fluctuations
- Temperature measurement with K-type temperature probe
- Peak hold function with calibration mode / Auto Zero function
- IP67 waterproof with double moulded rubber housing

Function	Range	Accuracy
DC Voltage	50mV - 1000V	±(0.05% +20)
AC Voltage	50mV - 1000V	±(0.3% +25)
AC + DC TRMS Voltage	50mV - 1000V	±(1.0% +25)
DC Current	500µA - 10A	±(0.1% +20)
AC Current	500µA - 10A	±(0.6% + 25)
AC + DC Current	500µA - 10A	±(1.0% + 25)
Resistance	50Ω - 50MΩ	±(0.5% +20)
Frequency	50Hz - 10MHz	±(0.01% +10)
Capacitance	5nF - 10mF	±(2.0% +40)
Temperature	-50°C to 1000°C	±( 1.0%+2.5)
Size	220 x 96 x 60mm	
Weight	631g	



MT1007



MT1881  
MT1881IS

## INDUSTRIAL DMM



The MT1881 is a True RMS professional multimeter having a large 6000 count backlit LCD with a 61 segment analogue bar graph, especially designed for everyday use by electricians. Capable of measuring 1000V AC and DC, with added measuring ranges of Resistance, AC/DC Current, Capacitance and Frequency. The meter has been designed that should a user turn the rotary switch in any direction whilst an input of less than 1000V AC/DC is applied to the meter, the meter will not get damaged. NCV function, automatic Non-Contact voltage detection, the LCD backlight will glow red when AC voltage above 110V is sensed. The meter has a double moulded rubber case with IP67 waterproof and dustproof rating, rugged design for heavy duty use.

### Features

- NCV detection above 110V AC, LCD turns red to indicate presence of voltage
- IP67 Dust & waterproof with O-ring sealed casing
- Auto range with manual override
- Measures frequency range of 10Hz to 10MHz on electronic and electrical circuits
- Measures AC and DC voltage to 1000V
- Capacitance to 4000µF / Relative mode / Data hold
- MIN/MAX recording mode
- 6000 Count LCD display and equipped with a 61 segment analogue bargraph
- Full ranges protection & Auto power off
- Overmould rubber housing & Integrated test lead holder
- Blue backlight for dimly lit areas
- MT1881IS Intrinsically safe version available

Function	Range	Accuracy
DC Voltage	600.0mV - 1000V	±(0.5% +5)
AC Voltage	6.000V - 1000V	±(0.8% +4)
AC Voltage VFD	50V - 600V	±(4% + 9)
DC Current	600.0µA - 10A	±(0.1% +3)
AC Current	600.0µA - 10A	±(1.5% +3)
Resistance	600.0Ω - 60.00MΩ	±(0.8% +2)
Frequency	9.999Hz - 9.999MHz	±(1% +3)
Capacitance	40.00nF - 4000µF	±(4% +5)
Size	187 x 81 x 50mm	
Weight	342g	



MT1882

## INDUSTRIAL DMM



The MT1882 is a True RMS professional multimeter especially designed for everyday use by HVAC technicians and electricians, whilst offering voltage measuring ranges up to 1000V AC and DC and with useful measuring ranges of Temperature, Resistance, AC/DC Current, Capacitance and Frequency. NCV function, automatic Non-Contact voltage detection, the LCD backlight will glow red when AC voltage above 110V is sensed. The large 6000 count backlit LCD display with a 61 segment bargraph ensures that readings are easy to read under all circumstances. The meter has been designed that should a user turn the rotary switch in any direction whilst an input of up to 1000V AC/DC is applied to the meter, the meter will not get damaged. The meter has a double moulded rubber case with IP67 waterproof and dustproof rating, rugged design for heavy duty use.

### Features

- IP67 Dust & waterproof with O-ring sealed casing
- Auto range with manual override
- Temperature between -20°C to 1000°C
- Measures frequency range of 10Hz to 10MHz on electronic and electrical circuits
- Measures AC and DC voltage to 1000V
- Capacitance to 4000µF / Relative mode / Data hold
- NCV detection above 110V AC, LCD turns red to indicate presence of voltage
- MIN/MAX recording mode
- Measures resistance up to 60MΩ
- 6000 Count LCD display with a 61 segment analogue bargraph
- Full ranges protection & Auto power off

- Integrated test lead holder
- Blue backlight for dimly lit areas

Function	Range	Accuracy
DC Voltage	600.0mV - 1000V	±(0.5% +2)
AC Voltage	6.000V - 1000V	±(0.8% +4)
AC Voltage VFD	50V - 600V	±(4.0% +9)
DC Current	600.0µA - 10A	±(1.0% +3)
AC Current	600.0µA - 10A	±(1.5% +3)
Resistance	600Ω - 60.00MΩ	±(0.8% +2)
Temperature	-20°C to 1000°C	±(3.0% +5)
Capacitance	40.00nF - 4000µF	±(1.0% +5)
Frequency	9.999Hz - 9.999MHz	±(4.0% +3)
Size	187 x 81 x 50mm	
Weight	342g	



MT1877

## INDUSTRIAL DMM



The MT1877 DMM is a 4000 count True RMS auto ranging multimeter, with manual override. This meter offers a great feature of measuring frequency on AC voltage and current with the range of 50Hz to 400Hz. The large LCD display with clear range annunciations and backlight ensure that readings are easy to read under all circumstances. This meter ensures that if the rotary switch is turned in any direction whilst signals less than 1000V AC/DC are input into the meter, the meter will not be damaged. It is even protected against measuring voltage if the knob is set on the ohms range accidentally. This meter is perfect for technicians in maintenance, facility maintenance, installation and production equipment maintenance.

### Features

- IP67 Dust & Waterproof with O-Ring sealed casing
- NCV detection above 110V AC, LCD turns red to indicate presence of voltage
- Auto Range with Manual Override
- Measures Frequency range on Electronic and Electrical Circuits
- Capacitance to 100mF
- Measures AC and DC Voltage to 1000V
- Relative Mode
- Data Hold / Duty Cycle
- 4000 Count LCD
- Full Ranges Protection
- Auto Power Off

- Overmould rubber housing
- Integrated Test Lead Holder
- Blue backlight for dimly lit areas

Function	Range	Accuracy
DC Voltage	400.0mV - 1000V	±(0.5% +5)
AC Voltage	400.0mV - 1000V	±(0.8% +8)
DC Current	400.0µA - 10A	±(1.0% +3)
AC Current	400.0µA - 10A	±(1.5% +3)
Resistance	400.0Ω - 40.00MΩ	±(0.8% +2)
Frequency	9.999Hz - 10.00MHz	±(1.0% +5)
Capacitance	99.99nF - 99.99mF	±(4.0% +5)
Size	187 x 81 x 50mm	
Weight	375g	



# IP67 INDUSTRIAL MULTIMETERS



## INDUSTRIAL DMM



The MT1887 is a CAT IV 600V True RMS professional multimeter having improved measurement functions, troubleshooting feature, resolution and accuracy to solve problems on power distribution, motor drives, electromechanical equipment and plant automation with the 4-20mA% loop measurements. The meter has a large 40 000 count backlit LCD with the added advantage of a 41 segment analogue bargraph. NCV function, automatic Non-Contact voltage detection, the LCD backlight will be in red when AC voltage above 110V is sensed. Specially designed for the Solar Industry the DC voltage range measures up to 1500V DC, other measuring ranges include ACV to 1000V, Micro Amps and Amps, Frequency, Resistance, Duty Cycle, capacitance and temperature measurements. The Bluetooth function allows the user to transmit data to the Android or iOS mobile App for viewing, organising and sharing recordings. The meter has a double moulded rubber case with IP67 waterproof and dustproof rating, rugged design for heavy duty use.

### Features

- 40 000 count with 41 Segment Bargraph
- Measures DCV to 1500V & ACV up to 1000V
- Temperature measurement from -50°C to 1000°C
- AC & DC Micro Amps up to 10A
- 4-20mA process loop measurements with % reading
- Capacitance to 40mF
- Frequency to 100MHz
- Duty Cycle
- Relative mode
- Automatic NCV where LCD backlight turns red
- Min, Max and Data Hold
- Auto Power Off
- IP67 Dust & waterproof with O-ring sealed casing
- MT1887IS Intrinsically safe version available

Function	Range	Accuracy
DC Voltage	400.0mV – 1500V	±(0.1% +6)
AC Voltage	4.0000V – 1000V	±(1.0% +8)
DC Current	400.0µA – 10A	±(1.0% +3)
AC Current	600.0µA – 10A	±(1.5% +8)
Resistance	400.0Ω – 40MΩ	±(0.5% +8)
Frequency	40.000Hz – 99.99MHz	±(0.1% +1)
Capacitance	40.00nF – 40mF	±(2.5% +10)
Temperature	-50°C – 1000°C	±(1.0% +2.5°C)
4-20mA	25% to 125%	±50 dgt
Duty Cycle	5.0% to 95.0%	±(1.2% +2)
Size	187 x 81 x 50mm	
Weight	342g	

■ Optional MT815 2m Test Leads



MT1887  
MT1887IS

## INDUSTRIAL DMM



The MT1885 is a CAT IV 600V True RMS multimeter specially designed for the Solar industry due to the measurement of up to 1500V DC. The meter has a large 6000 count backlit LCD with the added advantage of a 61 segment analogue bargraph. NCV function, automatic Non-Contact voltage detection, the LCD backlight will be in red when AC voltage above 110V is sensed. Other measuring ranges include ACV to 1000V, Micro Amps and Amps, Frequency, Resistance, Duty Cycle, capacitance and temperature measurements. The Bluetooth function allows the user to transmit data to the Android or iOS mobile App for viewing, organising and sharing recordings. The meter has a double moulded rubber case with IP67 waterproof and dustproof rating, rugged design for heavy duty use.

### Features

- 6000 count with 61 Segment Bargraph
- Measures DCV up to 1500V & ACV up to 1000V
- Temperature measurement from -20°C to 1000°C
- AC & DC Micro Amps up to 10A
- Capacitance to 100mF
- Frequency to 10MHz
- Duty Cycle
- Relative mode
- Automatic NCV where LCD backlight turns red
- Min, Max and Data Hold
- Auto Power Off
- IP67 Dust & waterproof with O-ring sealed casing

Function	Range	Accuracy
DC Voltage	600.0mV – 1500V	±(0.5% +5)
AC Voltage	6.000V – 1000V	±(0.8% +4)
DC Current	600.0µA – 10A	±(1.0% +3)
AC Current	600.0µA – 10A	±(1.5% +2)
Resistance	600.0Ω – 60MΩ	±(1.5% +2)
Frequency	9.999Hz – 9.999MHz	±(1.2% +4)
Capacitance	99.99nF – 100mF	±(4.0% +5)
Temperature	-20°C – 1000°C	±(3.0% +5°C)
Duty Cycle	5.0% to 99.9%	±(1.2% +2)
Size	187 x 81 x 50mm	
Weight	342g	

■ Optional MT815 2m Test Leads



MT1885

## IP67 WATERPROOF & DUST PROOF RATINGS

An Ingress Protection rating commonly known as IP usually has a two-digit rating. In the IP67 rating, the first digit 6 indicates full protection against dust and other particles, while the second digit 7 relates to full immersion for up to 30 minutes in depths up to 1 meter. The Major Tech multimeters were one of the first to have been designed to meet the IP67 rating.

Mining and some industries have harsh and tough conditions and normal multimeters do not adequately meet these demands. Typically, when an electrician has to go down a mine, the conditions underground are severe and there is normally a very high humidity content. A standard meter would be required to “Soak” a term describing the period of time for the meter to acclimatize under these conditions, which could be a few hours. Using the Major Tech IP67 multimeters these electricians or engineers can use the meters underground immediately to troubleshoot electrical problems with accuracy and safety. Even though the Major Tech MT1800 series have the IP67 rating their pricing is similar to that of standard mutimeters.





MT26

## COMPACT MULTIMETER



The MT26 is a CAT III 600V True RMS compact multimeter offering measurements of AC and DC voltage, AC and DC current, frequency, capacitance, resistance and temperature. The meter has a large 4000 count backlit LCD with the added advantage of an analogue bar graph. The Low Z function has a low pass filter to eliminate errors caused by "Ghost" voltages. There is a built-in LED flashlight for dimly lit areas and a tilt stand. The Bluetooth function allows the user to transmit data to the Android or iOS mobile App for viewing, organising and sharing recordings. The meter has a double moulded rubber case with IP67 waterproof and dustproof rating.

### Features

- 4000 count with 41 Segment Bargraph
- Measures AC and DC voltage up to 600V
- Temperature measurement from -18°C to 760°C
- Capacitance to 4000µF
- Frequency to 10MHz
- Duty Cycle
- Min, Max and Data Hold
- Auto Power Off
- LED Flashlight
- IP67 Dust & Waterproof
- LCD Back Light

Function	Range	Accuracy
DC Voltage	400.0mV – 600V	±(1.0% +3)
DC Voltage LowZ	400.0mV – 400V	±(1.5% +3)
AC Voltage	4.000V – 600V	±(1.2% +5)
AC Voltage LowZ	4.000V – 400V	±(1.5% +5)
DC Current	4.000A – 10A	±(2.0% +3)
AC Current	4.000A – 10A	±(2.5% +3)
Resistance	400.0Ω – 40MΩ	±(1.5% +5)
Frequency	9.999Hz – 9.999MHz	±(1.0% +5)
Capacitance	40.00nF – 4000µF	±(3.0% +5)
Temperature	-18°C – 760°C	±(2.0% +5°C)
Duty Cycle	0.1% to 99.9%	±(1.2% +2)
Size	147 x 68 x 50mm	
Weight	318g	



MT25

## COMPACT MULTIMETER



The MT25 digital multimeter is a compact handheld tester that provides fast and accurate measurements, displayed on a large 4000 count backlit display with the added advantage of a 41 segment analogue bargraph. The MT25 has a double moulded rubber housing with IP67 waterproof and dustproof rating for safety and durability and has the IEC 61010-1 CAT III 600V safety rating. Multiple measuring functions include AC and DC voltage, AC and DC current, resistance, capacitance, frequency, temperature and duty cycle, plus a continuity and diode test range. The MT25 also offers the added convenience of a built-in LED flashlight for dimly lit areas and a tilt stand.

### Features

- 41 Segment Bargraph
- Measures AC and DC voltage up to 600V
- Temperature measurement from -20°C to 760°C
- 4 000 Count LCD display
- LED Flashlight
- IP67 Dust & Waterproof
- Capacitance to 4000µF
- LCD Back Light
- Min, MAX & Data Hold
- Auto Power Off
- Auto Range and Manual Range Control
- Duty Cycle

Function	Range	Accuracy
DC Voltage	400.0mV - 600V	±(1.2% +2)
AC Voltage	4.000V - 600V	±(1.5% +10)
DC Current	4.000A - 10A	±(3.0% +5)
AC Current	4.000A - 10A	±(3.0% +5)
Duty Cycle	0.1 to 99.90%	±(1.2% +2)
Resistance	400.0Ω - 40.00MΩ	±(1.2% +5)
Frequency	9.999Hz - 9.999MHz	±(1.2% +2)
Capacitance	40.00nF - 4000µF	±(3.0% +5)
Temperature	-20 to 760°C	±(3.0% +5°C)
Size	147 x 68 x 50mm	
Weight	318g	



MT1883

## GENERAL PURPOSE MULTIMETER



The MT1883 is an average reading 2000 count manual range DMM and has a large backlit LCD display. The meter measures AC voltage up to 700V and DC voltage up to 1000V, fused AC and DC current up to 10 Amps, temperature measurement in °C or °F, resistance, frequency measurement and capacitance measurement, plus a diode test function and continuity buzzer. The meter measures AC voltage and current for the frequency range of 50Hz to 400Hz. The MT1883 is the first choice for electronic technicians and electricians, including students studying electronics.

### Features

- IP67 Dust & Waterproof with O-Ring sealed casing
- Manual Range
- Measures Frequency 1Hz to 2000KHz on Electronic and Electrical Circuits
- Temperature between -20°C to 760°C
- Capacitance to 200µF
- Measures ACV to 700V and DCV to 1000V, fused AC and DC current up to 10 Amps
- Measures Resistance up to 20MΩ
- 2000 Count LCD
- Full Ranges Protection
- Overmould rubber housing
- Integrated Test Lead Holder
- Backlight for dimly lit areas

Function	Range	Accuracy
DC Voltage	200mV - 1000V	±(0.5% +2)
AC Voltage	2.000V - 700V	±(1.0% +3)
DC Current	10A	±(1.5% +3)
AC Current	10A	±(2.5% +10)
Resistance	200.0Ω - 20.00MΩ	±(1.2% +2)
Temperature	-20°C to 760°C	±(3.0% +5)
Capacitance	2.000nF - 200.0µF	±(4.0% +3)
Frequency	2000Hz	±(1.5% +5)
Size	182 x 81 x 50mm	
Weight	375g	



# COMPACT MULTIMETERS



## COMPACT MULTIMETER



The MT876 is a compact True RMS multimeter supplied in a double moulded rubber housing, designed to withstand the rugged environment of a work site and has been drop tested up to 2 meters. This is an auto ranging multimeter with the option of manual override and has a 4000 count display with a back light. The “Live” function allows the user to physically connect one lead to the Live or Neutral wires to determine the Live contact and when detected, LIVE is displayed on screen and the NCV indicator light flashes and the buzzer sounds. This meter conforms to the International Standard IEC 61010-1 CAT III 600V, and is ideally suited for everyday use by electricians, electronic technicians, the air conditioning industry and DIY users.

### Features

- 4000 count with backlit LCD display
- Measures AC and DC voltage up to 600V
- Temperature measurement from -18°C to 1000°C
- Capacitance to 100mF
- Frequency to 10MHz
- Resistance to 40MΩ
- Battery test for 1.5V and 9V batteries
- Detection of LIVE wire
- Duty Cycle
- Min, Max and Data Hold
- Auto Power Off
- NCV – Non-Contact Voltage Detector

Function	Range	Accuracy
DC Voltage	400.0mV – 600V	±(0.5%+8)
AC Voltage	4.000V – 600V	±(1.2%+5)
DC Current	400.0µA – 10A	±(1.0%+8)
AC Current	400.0µA – 10A	±(1.2%+8)
Resistance	400.0Ω – 40MΩ	±(1.2%+5)
Frequency	9.999Hz – 9.999MHz	±(1.2%+5)
Capacitance	99.99nF – 100mF	±(3.5%+5)
Temperature	-18°C – 1000°C	±(1.5%+5°C)
Duty Cycle	0.1% to 99.9%	±(1.2%+5)
Battery Test	9V and 1.5V	±(1.0%+5)
Size	154 x 74 x 43mm	
Weight	221g	



MT876

## COMPACT MULTIMETER



The MT874 is a durable and attractive compact True RMS multimeter with a high contrast LCD display with detailed display icons. Equipped with 7 measuring functions and 20 ranges, each test position is quickly and easily selected with a simple turn of the selector switch. The meter has a double moulded rubber housing and has IEC 61010-1 CAT III 600V safety rating. The sturdy structure is designed to withstand the rugged environment of a work site and has been drop tested up to 2 meters. The meter has a built-in tilt stand for hands free convenience as well as low battery indication and auto power off. This meter is ideally suited for everyday use by electricians, electronic technicians, the air conditioning industry and DIY users.

### Features

- Large 2000 count LCD display
- Measures AC and DC voltage up to 600V
- Measures AC and DC current up to 10A
- Resistance to 2MΩ
- Battery test for 1.5V and 9V batteries
- Continuity Buzzer & Diode Test
- Data Hold Function
- Relative Mode
- Auto Power Off

Function	Range	Accuracy
DC Voltage	200.0mV – 600V	±(0.8%+5)
AC Voltage	200.0V – 600V	±(1.2%+10)
DC Current	200.0mA – 10A	±(1.2%+5)
AC Current	200.0mA – 10A	±(1.2%+5)
Resistance	200.0Ω – 2MΩ	±(0.8%+5)
Battery Test	9V and 1.5V	±(1.0%+5)
Auto Power Off	Approximately 15 minutes	
Size	154 x 74 x 43mm	
Weight	221g	



MT874

## 6-IN-1 ENVIRONMENT DMM



The MT1875 is a 6-in-1 Digital Multimeter with Environmental Measurement. It has been designed to combine the functions of Sound Level, Light Meter, Humidity, Temperature and non contact voltage detector all in one meter. Sound level can be used in factories, schools, offices and homes, checking acoustics of studios, auditoriums and hi-fi installations. Light meter is fully cosine corrected for the angular incidence of light. Temperature is measured via a K-Type thermocouple. The DMM function includes AC voltage, DC voltage, AC current, DC current, Resistance, Capacitance, Frequency and Duty Cycle.

### Features

- 6-in-1 multifunction meter with environment measurement
- Fully functional DMM with ACV, DCV, ACA, DCA, Ohms, Frequency, Capacitance and Duty Cycle
- Continuity Buzzer and Diode Test
- Non-contact voltage detector
- LUX Meter measurement to 40,000 lux
- Humidity range from 33% to 99% RH (0.1%)
- Temperature from -20°C to 750°C
- Sound level measurement to 110dB
- 4000 Count digital display with backlight
- Data hold and relative function

Function	Range	Accuracy
DC Voltage	400.0mV - 600V	±(1.0%+4)
AC Voltage	400.0mV - 600V	±(1.0%+4)
DC Current	400.0µA - 10A	±(1.0%+2)
AC Current	400.0µA - 10A	±(2.0%+5)
Resistance	400.0Ω - 40.00MΩ	±(1.5%+2)
Frequency	5.000Hz - 10.00MHz	±(1.2%+3)
Capacitance	50.00nF - 100.0µF	±(3.0%+5)
Temperature	-20°C to 750°C	±(3.0%+5)
Humidity	33%-99%	±(3.0%+5)
Lux	4000-40,000Lux	±(5.0%+10)
Decibel	35 - 110dB	±(5.0%+10)
AC Bandwidth	50Hz to 400Hz	
Duty Cycle	99.90%	± 1.2%
Size	187 x 81 x 50mm	
Weight	355g	



MT1875



MT22

## COMPACT MULTIMETER

The MT22 is a compact meter with double moulded rubber housing and meets the International Standard IEC-61010-1 CAT III 600V. The large LCD display screen has a white backlight for use in arduous areas. It is a very economical tester ideally suited for everyday use by electricians, electronic technicians as well as the air conditioning industry. This compact auto ranging multimeter has a large 2000 count LCD and measures AC and DC voltage up to 1000 volts, AC and DC Current up to 10 Amps, Temperature measurement in °C or °F and resistance, plus a diode test function and continuity buzzer. The meter has a "Clamp-On Adaptor" range which allows the user to use an optional AC and DC clamp adaptor on the meter to increase the current measuring capabilities up to 2000 Amps.

### Features

- Measures ACV and DCV to 1000V
- MIN/MAX Recordings
- Temperature between -50°C to 1000°C
- Fused 10A Range
- Diode Test & Continuity buzzer
- Data Hold
- Duty Cycle
- Resistance to 20MΩ
- 2000 Count LCD
- Full Ranges Protection
- Clamp-on Adaptor range



Function	Range	Accuracy
DC Voltage	200.0mV - 1000V	±(1.2%+2)
AC Voltage	200.0mV - 1000V	±(1.5%+3)
DC Current	200.0μA - 10A	±(2.5%+5)
AC Current	200.0μA - 10A	±(3.0%+7)
Resistance	200.0Ω - 20.00MΩ	±(1.2%+2)
Frequency	10MHz	±(1.2%+3)
Temperature	-50°C to 1000°C	±(3.0%+5)
Size	150 x 70 x 48mm	
Weight	255g	



MT21

## COMPACT MULTIMETER

The MT21 is a compact meter with double moulded rubber housing and meets the International Standard IEC-61010-1 CAT III 600V. The large LCD display screen has a white backlight for use in arduous areas. It is a very economical tester ideally suited for everyday use by electricians, electronic technicians as well as the air conditioning industry. The MT21 is a basic 2000 count multimeter and is designed to efficiently support the first level electronic and electrical trouble shooting. The meter measures AC and DC voltage to 600V, resistance to 2000 ohms, and DC current to 10A, plus has a diode test function and a continuity buzzer. An added function of the MT21 is the battery test ranges, which test 1.5V and 9V batteries with a load.

### Features

- 600V AC/DC Voltage
- 10A DC Current
- Resistance to 2000kΩ
- Battery test 1.5V & 9V batteries
- 2 000 Count LCD display
- Overmould Rubber Housing
- Integrated Test Lead holder



Function	Range	Accuracy
DC Voltage	200mV - 600V	±(0.8%+2)
AC Voltage	200V - 600V	±(1.2%+10)
DC Current	2000μA - 10A	±(2.5%+5)
Resistance	200Ω - 2000kΩ	±(1.0%+2)
Size	187 x 81 x 51mm	
Weight	342g	



MTD84

## COMPACT MULTIMETER

The MTD84 is a compact True RMS auto ranging multimeter with a 6000 count LCD backlit display. The Smart mode, "AUTO", is a function that automatically identifies DC voltage, AC voltage, Resistance and continuity and automatically displays the measurements. There is a built-in Non-Contact voltage detector, by pressing the NCV button continuously the LCD displays "EF" and will display "----" when voltage is detected and the buzzer sounds. This meter meets the International Standard IEC 61010-1 CAT III 600V, and is ideally suited for everyday use by electricians, electronic technicians, students and DIY users. The meter has a built-in tilt stand for hands free convenience as well as low battery indication and auto power off.

### Features

- 6000 count with backlit LCD display
- Smart Mode automatically identifies DCV, ACV, Resistance and continuity
- Measures DC voltage up to 1000V and AC voltage to 750V
- Temperature measurement from -20°C to 1000°C
- Capacitance to 10mF
- Frequency to 10MHz
- Duty Cycle
- REL mode and Data Hold
- Auto Power Off
- NCV - Non-Contact Voltage Detector



Function	Range	Accuracy
DC Voltage	60.00mV - 1000V	±(0.5%+3)
AC Voltage	60.00mV - 750V	±(1.0%+3)
DC Current	60.00mA - 10A	±(1.2%+3)
AC Current	60.00mA - 10A	±(1.5%+3)
Resistance	600.0Ω - 60MΩ	±(0.5%+3)
Frequency	99.99Hz - 9.999MHz	±(0.1%+2)
Capacitance	9.999nF - 10mF	±(2.0%+5)
Temperature	-20°C - 1000°C	±(2.5%+5°C)
Duty Cycle	1% to 99.9%	±(0.1%+2)
Size	130 x 65 x 32mm	
Weight	138g	



MTD81

## COMPACT MULTIMETER

The MTD81 is a compact auto ranging multimeter with a 4000 count LCD backlit display. Measuring functions include AC and DC voltage, AC and DC current, Resistance, Frequency, Capacitance, continuity buzzer and diode test range. This meter meets the International Standard IEC 61010-1 CAT III 600V, and is ideally suited for everyday use by electricians, electronic technicians, students and DIY users. The meter has a built-in tilt stand for hands free convenience as well as low battery indication and auto power off.

### Features

- 4000 count with backlit LCD display
- Measures DC voltage up to 1000V and AC voltage to 750V
- Measures AC and DC current up to 10A
- Capacitance to 200μF
- Frequency to 10MHz
- Duty Cycle
- Continuity buzzer and Diode Test
- REL mode and Data Hold
- Auto Power Off



Function	Range	Accuracy
DC Voltage	400mV - 1000V	±(0.5%+4)
AC Voltage	400mV - 750V	±(1.2%+4)
DC Current	40.00mA - 10A	±(1.5%+4)
AC Current	40.00mA - 10A	±(2.0%+4)
Resistance	400.0Ω - 40MΩ	±(0.8%+4)
Frequency	99.99Hz - 9.999MHz	±(0.1%+2)
Capacitance	4.000nF - 200μF	±(3.5%+4)
Duty Cycle	1% to 99.9%	±(0.1%+2)
Size	130 x 65 x 32mm	
Weight	136g	



# COMPACT MULTIMETERS



## COMPACT MULTIMETER



The MT873 is a True RMS multimeter and can be used to measure AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle, Non-Contact AC Voltage (NCV) detection, diode test and audible continuity. It also features a data hold & relative mode functions. This multimeter is a slim sized, portable, robust drop proof digital multimeter has a 6000 count digit LCD monitor with large 25mm digits that offer clear and easy reading. The circuitry design is centred on large-scale IC A/D converters in conjunction with an over-load protection circuit, the meter offers excellent performance and is ideal for a versatile digital multimeter.

### Features

- Large 6000 count LCD display
- Measures AC and DC voltage up to 600V
- Measures AC and DC current up to 10A
- Capacitance and Frequency Measurements
- Temperature measurement from -20°C to 1000°C
- NCV – Non-Contact Voltage Detector
- Continuity Buzzer & Diode Test
- Min, Max and Data Hold Function
- Relative Mode
- Auto Power Off
- Auto back light

Function	Range	Accuracy
DC Voltage	600.0mV - 600V	±(0.5% +2)
AC Voltage	6V - 600V	±(1.0% +3)
DC Current	600µA- 10A	±(1.2% +2)
AC Current	600µA- 10A	±(1.2% +2)
Duty Cycle	0.1 to 99.9%	±(2% +2)
Resistance	600Ω - 60MΩ	±(1.0% +2)
Frequency	9.999Hz - 9.999MHz	±(0.1% +5)
Capacitance	9.999nF - 99.99mF	±(3.0% +10)
Temperature	-20°C to 1000°C	±(3.0% +1)
Size	150 x 100 x 36mm	
Weight	250g	



MT873

## COMPACT MULTIMETER



The MT870 is a compact True RMS multimeter supplied with a rubber holster designed to be robust and drop proof. The meter has a 2000 count large easy to read display and is an auto ranging multimeter with the option of manual override. Measuring functions include AC and DC voltage, AC and DC current, resistance, continuity buzzer and diode test range. The AC and DC micro Amp ranges is suited for electronic measurements. The MT870 also offers the added convenience of 1.5V and 9V battery tests and a tilt stand. This meter meets the International Standard IEC 61010-1 CAT III 300V. The meter offers excellent performance and is ideal as a handy multimeter for electronic technicians and electricians, alarm installers and students studying electronics.

### Features

- Large 2000 count LCD display
- Measures AC and DC voltage up to 600V
- Measures AC and DC current up to 10A
- Battery test for 1.5V and 9V batteries
- Continuity Buzzer & Diode Test
- Min, Max and Data Hold Function
- Relative Mode
- Auto Power Off

Function	Range	Accuracy
DC Voltage	200.0mV – 600V	±(0.5% +2)
AC Voltage	2.000V – 600V	±(0.8% +3)
DC Current	200.0µA – 10A	±(1.2% +2)
AC Current	200.0µA – 10A	±(1.5% +3)
Resistance	200.0Ω – 20MΩ	±(1.0% +2)
Battery Test	9V and 1.5V	±(5.0% +5)
Auto Power Off	Approximately 15 minutes	
Size	150 x 100 x 34mm	
Weight	250g	



MT870

## COMPACT MULTIMETER



The MT24 is a compact meter with double moulded rubber housing and meets the International Standard IEC-61010-1 CAT III 600V. The large LCD display screen has a white backlight for use in arduous areas. This meter is a very economical tester ideally suited for everyday use by electricians, electronic technicians as well as the air conditioning industry. The MT24 is an auto ranging multimeter with the option of manual override, and has a 6000 count LCD display with a 61 segment analogue bargraph. This meter offers features of MIN/MAX recordings, Data Hold, Frequency measurement with Duty Cycle, Capacitance measurement of up to 4000µF and resistance of 60MΩ. It has the added function of temperature measurement in either °C or °F, with a range from -20°C up to 760°C. An adaptor is supplied which converts the 4mm input to accept K-Type thermocouples.

### Features

- Measures AC and DC Voltage to 1000V
- MIN/MAX Recordings
- Auto Range with Manual Override
- Frequency measurement to 10MHz
- Capacitance to 4000µF
- Temperature from -20°C to 760°C
- Data Hold
- Duty Cycle
- 6000 Count LCD with bargraph
- Auto Power Off
- Overmould rubber housing
- Integrated Test Lead Holder
- Backlight for dimly lit areas

Function	Range	Accuracy
DC Voltage	600.0mV - 1000V	±(1.2% +2)
AC Voltage	6.000V - 1000V	±(1.5% +3)
DC Current	6A - 10A	±(2.5% +5)
AC Current	6A - 10A	±(3.0% +5)
Resistance	600.0Ω - 60.00MΩ	±(2.0% +2)
Frequency	9.999Hz - 10MHz	±(1.2% +3)
Capacitance	40.00nF - 4000µF	±(3.0% +5)
Temperature	-20°C to 760°C	±(3.0% +5)
Size	150 x 70 x 48mm	
Weight	255g	



MT24

**TRUE RMS**



MTD80

## COMPACT MULTIMETER



The MTD80 is a compact True RMS auto ranging multimeter with a 4000 count LCD backlit display. The meter always operates in the Smart mode "AUTO" function that automatically identifies DC voltage, AC voltage, Resistance and continuity buzzer and automatically displays the measurements. There is a built-in Non-Contact voltage detector, by pressing the NCV button continuously the LCD displays "EF" and will display "----" when voltage is detected and the buzzer sounds. This meter meets the International Standard IEC 61010-1 CAT II 600V/ CAT III 300V, and is ideally suited for users who wants a simple meter to automatically read the measurement of the circuit or system under test. Ideal for everyday use by electricians, electronic technicians, alarm installers, students and DIY users. The meter has a rubber holster with a built-in tilt stand for hands free convenience as well as low battery indication and auto power off.

### Features

- 4000 count with backlit LCD display
- Smart Mode automatically identifies DCV, ACV, resistance and continuity
- Measures AC and DC voltage up to 600V
- Measures AC and DC current up to 10A
- NCV – Non-Contact Voltage Detector
- Continuity buzzer
- Data Hold function
- Auto Power Off
- Built-In LED Flashlight

Function	Range	Accuracy
DC Voltage	4.000V – 600V	±(0.5% +3)
AC Voltage	4.000V – 600V	±(1.0% +3)
DC Current	1000.0mA – 10A	±(1.0% +4)
AC Current	1000.0mA – 10A	±(2.0% +3)
Resistance	4.000kΩ – 40MΩ	±(0.5% +3)
Size	120 x 62 x 30mm	
Weight	140g	



MTD10

## COMPACT MULTIMETER



The MTD10 is a compact 2000 count DIY digital multimeter and is designed as an ideal meter for general purpose use by electronic technicians, alarm installers, students, hobbyist and homeowners. The MTD10 measures AC and DC voltage to 500V, resistance to 2M Ohms, DC current to 10A, plus has a diode test function and continuity buzzer. The meter also offers the added convenience of a 1.5V battery test under load, a transistor test range, backlit display, data hold and a tilt stand. The meter meets the International standard IEC 61010-1 CAT II 600V / CAT III 300V. Supplied standard with a rubber holster, test leads and a 9V battery.

### Features

- 8 Functions & 21 Versatile ranges
- 3½ Inch Digital LCD screen
- AC/DC Voltage to 500V
- Measures DC Current to 10A
- Resistance to 2MΩ
- Transistor Test for NPN and PNP transistors
- Diode Check, Continuity, Data Hold
- 1.5V Battery Test
- Backlight
- Overload Protection

Function	Range	Accuracy
DC Voltage	200mV - 500V	±(1% +2)
AC Voltage	200.0V - 500V	±(2.5% +10)
DC Current	200μA - 10A	±(2% +5)
Resistance	200Ω - 2MΩ	±(1% +5)
Size	140 x 70.6 x 31mm	
Weight	170g	



MT832

## ANALOGUE MULTIMETER



The MT832 Analogue Meter is an ideal meter for general purpose site applications for students, hobbyist and homeowners. The MT832 has 24 versatile ranges, 0 adjust and has a large mirrored scale to easily identify the measurements. This meter is supplied standard with a protective rubber holster.

### Features

- 24 Versatile Ranges
- Measures AC and DC Voltage to 1000V
- DC Current to 10 Amps
- Measures Resistance up to 20MΩ
- Large Mirror Scale
- 0 adjust
- Continuity Buzzer
- Transistor test
- 20kΩ/V Sensitivity

Function	Range	Accuracy
DC Voltage	0.1V - 1000V	±(3% of full scale)
AC Voltage	10V - 1000V	±(4% of full scale)
DC Current	50μA - 10A	±(3% of full scale)
Resistance	2Ω - 20MΩ	±(3% of ARC)
Size	170 x 110 x 50mm	
Weight	280g	



MT800

## POCKET MULTIMETER

The MT800 Analogue Multimeter is a cost effective analogue multimeter for hobbyist and home owner for shop, office, home, boats and cars. The MT800 has 16 versatile ranges, ohm zero adjust and has a mirrored scale to easily identify the measurements.

### Features

- 5 Functions & 16 versatile ranges
- Measures AC / DC V 500V, DC A 250mA
- Resistance 2kΩ - 200kΩ FS
- 1.5V - 9V Battery Test
- Mirror scale for accurate reading
- Recessed input terminals for safe use
- Overload Protection

Function	Range	Accuracy
DC Voltage	2.5V - 500V	±(5% of full scale)
AC Voltage	10V - 500V	±(5% of full scale)
DC Current	500μA - 250mA	±(5% of full scale)
Resistance	2Ω - 200kΩ FS	±(5% of ARC)
Size	100 x 64 x 35mm	
Weight	125g	



# 2-IN-1 MULTIMETERS



## 2-IN-1 LAN TESTER DMM



The MTC50 is a 2-in-1 LAN tester as well as an auto ranging multimeter. This meter has been designed as a very practical tester that can easily read the correct pin configuration of 10/100 Base-T cable (Category 5), 10Base-2 cable (coax), RJ45/RJ11 modular cables, AT&T 258A, 356A, TIA-568A/568B and Token Ring cable by comparing one transmitting end to the corresponding receiving end. With the remote kit test cables can be installed over long distances either on wall plates or patch panels. It is easy to verify the cable continuity, open, short and cross-connect. The auto range digital multimeter allows the user to measure AC and DC voltage, AC and DC current, Resistance, Continuity and Diode test.

### Features

- LED displays the actual pin configuration and tests the correct pin configuration of 100Base-T, 10Base-T, 10Base-2 Thin Ethernet cable, RJ45/RJ11 modular cables 356A, TIA-568A/568B and Token Ring cable etc
- With remote kit it can remotely test cables up to 300m away either on wall plate or patch panel
- Can test the grounding
- Provides easy to read continuity and fault status display
- Measures ACV and DCV up to 600V, ACA and DCA up to 200mA,
- Locked Status wiring function
- LAN Testing
- Tests CAT 5 Installations

Function	Range	Accuracy
DC Voltage	200mV - 600V	$\pm(1.0\% + 3)$
AC Voltage	200mV - 600V	$\pm(1.0\% + 5)$
DC Current	200.0 $\mu$ A - 200.0mA	$\pm(1.5\% + 3)$
AC Current	200.0 $\mu$ A - 200.0mA	$\pm(1.8\% + 8)$
Resistance	200.0 $\Omega$ - 20M $\Omega$	$\pm(1.2\% + 3)$
Continuity	Beep is less than 100 $\Omega$	
Test Pin Configuration	10 Base-T; 10 Base-2 Twin Ethernet Cable 100 Base-T, RJ45/RJ11 Modular 258A, tia-568a/568d, Token Ring Cables	
Batteries	9V & 2x AA	
Size	162 x 75 x 43mm	
Weight	308g	



MTC50

## 2-IN-1 CABLE FINDER/DMM



The MT915 is an amazing tracing system which will save hours instead of "Ring-Out" any circuit. The MT915 consists of a transmitter & receiver device which enables one person to instantly match up ends of individual cores at either end of a multi-core cable. With the remote kit the meter can test cables installed over long distances either on wall plates or patch panels. The DMM function makes it easy to measure AC Volts, DC Volts, AC and DC Current, Resistance, Continuity and Diode Test.

### Features

- Measures AC and DC Voltage up to 600V
- Measures AC and DC Current up to 200mA
- Resistance to 20M $\Omega$
- Diode and Continuity
- 2000 Count Digital Display
- Identifies up to 16 cables
- Cuts out "Bell-Out" time
- Displays the cable number on the large LED display
- Transmitter and Receiver included

Function	Range	Accuracy
DC Voltage	200mV - 600V	$\pm(1.0\% + 3)$
AC Voltage	200mV - 600V	$\pm(1.0\% + 5)$
DC Current	200.0mA	$\pm(1.5\% + 3)$
AC Current	200.0 $\mu$ A - 200.0mA	$\pm(1.8\% + 8)$
Resistance	200 $\Omega$ - 20M $\Omega$	$\pm(1.2\% + 3)$
Digital Display	2000	
Cable Resistance	30k $\Omega$ Max	
Size	162 x 74 x 43 mm	
Weight	308g	



MT915

## 2-IN-1 TONE & PROBE DMM



The MTC45 is a 2-in-1 Tone and Probe generator as well as an auto ranging multimeter. The meter tests include wire trace, continuity test, clear/busy/ringing, line test and tip/ring identification. The unit is supplied with crocodile clips for non terminated cables and modular connectors for direct connections to telephone and internet wiring. The auto range digital multimeter can measure AC/DC volts, AC/DC current, Resistance, Diode and has a continuity buzzer.

### Features

- Tests include wire trace, continuity test, clear/busy/ringing line test and tip/ring identification
- Alligator clips for non-terminated cables and modular connectors for direct connections to telephone or internet wiring
- Built-in speaker on probe with sensitivity control
- Selectable continuous or variable tone generation
- Insulated inductive probe tip prevents shorting conductors
- Measures ACV and DCV up to 600V, ACA and DCA up to 200mA, Resistance to 20M $\Omega$ , Diode and Continuity
- RJ11 modular connectors

Function	Range	Accuracy
DC Voltage	200mV - 600V	$\pm(1.0\% + 3)$
AC Voltage	200mV - 600V	$\pm(1.0\% + 5)$
DC Current	200.0 $\mu$ A - 200.0mA	$\pm(1.5\% + 3)$
AC Current	200.0 $\mu$ A - 200.0mA	$\pm(1.8\% + 8)$
Resistance	200.0 $\Omega$ - 20M $\Omega$	$\pm(1.2\% + 3)$
Tone Output	Beep is less than 100 $\Omega$ Continuity: 800 ~ 860Hz Wobble: 800 ~ 1050Hz RJ45 and RJ11	
Batteries	Generator: 9V & 2x AA Probe: 9V	
Size	Generator: 162 x 75 x 44mm Probe: 228 x 57 x 25mm	
Weight	308g	



MTC45



## CLAMP METERS

### CONTENTS

Thermal Imaging Clamp Meter	19
Solar Clamp Meter	20
IR Thermometer Clamp Meters	21
AC Clamp Meters	22
AC/DC Clamp Meters	27
AC/DC Power Meters	31
AC Leakage Clamp Meters	32





# THERMAL IMAGING CLAMP METER



## 1000A AC/DC THERMAL CLAMP METER

The MT784 is a CAT IV 600V True RMS 1000A AC/DC digital clamp meter incorporating an 80 x 80 pixel Thermal Imager with a range from -20°C to 260°C. This clamp meter has a large 6000 count colour TFT LCD display that provides fast sampling times and high accuracy measurements. The meter has been designed to measure 1500V DC purposely for the Solar industry, 1000V AC, K-Type temperature, frequency, capacitance, AC+DC Voltage and resistance measurements, plus the Low Z range function has a low pass filter to eliminate errors caused by "Ghost" voltages. The 100ms Inrush current detects starting up currents of electric motors, input surge current, or switch-on surge currents, this is the maximum instantaneous input current drawn by an electrical device when first turned on. The meter has a built-in record and store function and displays trend capture, using the Bluetooth function the meter wirelessly transmits data to the Android or iOS mobile App allowing the user to view, save, organise and share recordings. Added features is Non-Contact voltage detection, Peak Hold, Min/Max and Average, Data hold function and a built-in flashlight for dimly lit areas. The double injection moulded housing is IP65 waterproof.

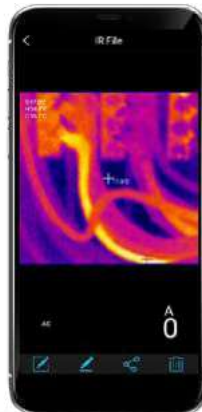
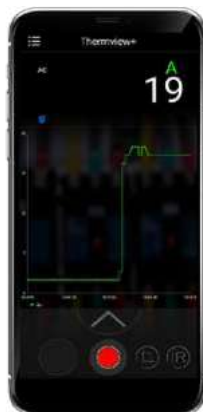
### Features

- 6000 count 2.4" TFT Colour LCD display
- Ø37mm Cable Clamp size
- Measurement of DC voltage to 1500V and AC voltage up to 1000V
- AC+DC TRMS Voltage
- INRUSH Current Measurements
- Capacitance to 100mF
- K-type Temperature measurement from -40°C to 1000°C
- Thermal Temperature -20°C to 260°C
- 80 x 80 pixel Thermal Imager Resolution
- Image Frequency to 50Hz
- Logging function with Trend Capture
- NCV – Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Max, Min and Average with Time Stamp
- Auto Power Off
- Optional MT740 Flexible Coil Clamp for measurement to 3000A AC

Function	Range	Accuracy
<b>Imaging and Optical Data</b>		
Field of View	21° x 21° / 0.5m	
Spatial Resolution	4.53mrad	
Thermal sensitivity	<0.1°C at 30°C / 100mK	
Image Frequency	50Hz	
IR Resolution	80 x 80 Pixels	
<b>Imaging Presentation</b>		
Display	2.4" TFT Colour LCD, 240 x 320 pixels	
<b>Measurements</b>		
Thermal Temperature Range	-20°C to 260°C	±(3.0% +3°C)
<b>Measurement Analysis</b>		
Spot	Center Spot	
Automatic Detection	Hot Point or Cold Point	
Emissivity Correction	Variable 0.01 to 0.99 in 0.01 steps	
Colour Palette	Iron / Rainbow / Grey / Grey Inverted / Feather	
Focus Mode	Focus Free	
Focal Length	7.5mm	
Spectral range	8 - 14µm	
Data Communication Interface	Bluetooth BLE	
<b>Clamp Meter</b>		
Jaw Size	37mm	
DC Current	60.00A – 1000A	±(2.0% +8)
AC Current	60.00A – 1000A	±(2.5% +5)
Flexible Coil Current (Optional)	30.00A – 3000A	±(3.0% +5)
DC Voltage	600.0mV – 1500V	±(0.5% +5)
AC Voltage	6.000V – 1000V	±(1.2% +5)
LowZ AC Voltage	6.000V – 300V	±(3.0% +40)
AC+DC TRMS Voltage	6.000V – 1000V	±(2.5% +20)
LowZ AC+DC Voltage	6.000V – 300V	±(3.5% +40)
Resistance	600.0Ω – 60MΩ	±(0.8% +5)
Frequency	60.00Hz – 10.00kHz	±(0.2% +5)
Capacitance	60.0nF – 100.0mF	±(3.0% +8)
K-Type Temperature	-40°C to 1000°C	±(1.5% +3°C)
Duty Cycle	10.0% to 90%	±(1.2% +8)
Size	270 x 95 x 42mm	
Weight	550g	



MT784



File transfer via Bluetooth to free iOS or Android app (phone not included)

## 1000A AC/DC CLAMP METER



MT782



The MT782 is a CAT IV 600V True RMS 1000A AC/DC digital clamp meter. This clamp meter has a large 6000 count colour TFT LCD display with an analogue bargraph that provides fast sampling times and high accuracy measurements. The meter has been designed to measure 1500V DC purposely for the Solar industry, 1000V AC, K-Type temperature, frequency, capacitance, AC+DC Voltage and resistance measurements. The Low Z ACV range has a low pass filter to eliminate errors caused by "Ghost" voltages. The 100ms Inrush current detects starting up currents of electric motors, input surge current, or switch-on surge currents, this is the maximum instantaneous input current drawn by an electrical device when first turned on. The meter has a built-in record and store function and displays trend capture, using the Bluetooth function the meter wirelessly transmits data to the Android or iOS mobile App allowing the user to view, save, organise and share recordings. Added features is Non-Contact voltage detection, Peak Hold, Min/Max and Average, Data hold function and a built-in flashlight for dimly lit areas. The double injection moulded housing is IP65 waterproof.

### Features

- 6000 count 2.4" TFT Colour LCD display
- Ø37mm Cable Clamp size
- Measurement of DC voltage to 1500V and AC voltage up to 1000V
- AC+DC TRMS Voltage
- INRUSH Current Measurements
- Capacitance to 100mF
- Temperature measurement from -40°C to 1000°C
- Logging function with Trend Capture
- NCV – Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Max, Min and Average with Time Stamp
- Auto Power Off
- Optional MT740 Flexible Coil Clamp for measurement to 3000A AC

Function	Range	Accuracy
Jaw Size	37mm	
DC Current	60.00A - 1000A	±(2.0%+8)
AC Current	60.00A - 1000A	±(2.5%+5)
Flexible Coil		
Current (Optional)	30.00A - 3000A	±(3.0%+5)
DC Voltage	600.0mV – 1500V	±(0.5%+5)
AC Voltage	6.000V – 1000V	±(1.2%+5)
LowZ AC Voltage	6.000V – 300V	±(3.0%+40)
AC+DC TRMS Voltage	6.000V – 1000V	±(2.5%+20)
LowZ AC+DC Voltage	6.000V – 300V	±(3.5%+40)
Resistance	600.0Ω – 60MΩ	±(0.8%+5)
Frequency	60.00Hz – 10.00MHz	±(0.2%+5)
Capacitance	60.00nF – 100.0mF	±(3.0%+8)
Temperature	-40°C to 1000°C	±(1.5%+3°C)
Duty Cycle	10.0% to 90%	±(1.2%+8)
AC Current	60.00A - 1000A	±(2.5%+5)
Size	270 x 95 x 42mm	
Weight	550g	



File transfer via Bluetooth to free iOS or Android app (phone not included)



# IR THERMOMETER CLAMP METERS



## 600A AC/DC CLAMP METER

TRUERMS

The MT767 is a CAT IV 600V True RMS 600A AC/DC digital clamp meter incorporating an Infrared Thermometer. This clamp meter has a large 6000 count negative LCD display that provides fast sampling times and high accuracy measurements. The Bluetooth function allows the user to transmit data to the Android or iOS mobile App for viewing, organizing and sharing recordings. The meter measures 1000V AC/DC, frequency, capacitance and resistance measurements. The IR Thermometer has a spot ratio of 4:1 and measures temperature from -30°C to +350°C, plus there is a K-Type thermometer input for measurements up to 1000°C. The 100ms Inrush current detects starting up currents of electric motors, input surge current, or switch-on surge currents, this is the maximum instantaneous input current drawn by an electrical device when first turned on. The VFD function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives. Added features include Relative mode for Capacitance Zero and DCV, ACV and ACA offset adjustment, Non-Contact voltage detection, MAX/MIN and Data hold function plus a built-in flashlight for dimly lit areas. Housed in a modern double moulded rubber housing with a rugged design. This meter is a useful measuring tool for electricians, maintenance and HVAC environments.

### Features

- 6000 count negative LCD display
- Ø33mm Cable Clamp size
- Measurement of DC voltage and AC voltage up to 1000V
- Capacitance to 100mF
- Temperature measurement from -20°C to 1000°C
- IR Temperature Spot Ratio 4:1 & measurement from -30°C to 350°C
- INRUSH Current Measurements
- VFD - Variable Frequency Drive voltage value
- NCV - Non-Contact Voltage Detector
- Continuity buzzer and Diode Test
- Built-In Flashlight
- Max/Min
- Data Hold function
- Auto Power Off



Function	Range	Accuracy
Jaw Size	33mm	
DC Current	60.00A - 600A	±(2.8% +8)
AC Current	60.00A - 600A	±(1.5% +10)
DC Voltage	600.0mV - 1000V	±(1.2% +5)
AC Voltage	6.000V - 1000V	±(1.5% +5)
Resistance	600.0Ω - 60MΩ	±(2.0% +5)
Frequency	9.999Hz - 9.99kHz	±(1.5% +6)
Capacitance	999.9nF - 100mF	±(4.0% +6)
Temperature	-20°C - 1000°C	±(3.0% +3°C)
IR Temperature	-30°C - 350°C	±(2.0% +2°C)
Duty Cycle	20.0% - 80%	±(1.2% +5)
Size	236 x 66 x 44mm	
Weight	350g	

MT767



## 600A AC/DC CLAMP METER

TRUERMS

The MT766 is a CAT IV 600V True RMS 600A AC/DC digital clamp meter incorporating an Infrared Thermometer. This clamp meter has a large 6000 count negative LCD display that provides fast sampling times and high accuracy measurements. The meter measures 1000V AC/DC, frequency, capacitance and resistance measurements. The IR Thermometer has a spot ratio of 4:1 and measures temperature from -30°C to +350°C, plus there is a K-Type thermometer input for measurements up to 1000°C. The VFD function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives. Added features include Relative mode for Capacitance Zero and DCV, ACV and ACA offset adjustment, Non-Contact voltage detection, MAX/MIN and Data hold function plus a built-in flashlight for dimly lit areas. Housed in a modern double moulded rubber housing with a rugged design. This meter is a useful measuring tool for electricians, maintenance and HVAC environments.

### Features

- 6000 count negative LCD display
- Ø33mm Cable Clamp size
- Measurement of DC voltage and AC voltage up to 1000V
- Capacitance to 100mF
- Temperature measurement from -20°C to 1000°C
- IR Temperature Spot Ratio 4:1 & measurement from -30°C to 350°C
- VFD - Variable Frequency Drive voltage value
- NCV - Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Max, Min and Data Hold function
- Auto Power Off



Function	Range	Accuracy
Jaw Size	33mm	
DC Current	60.00A - 600A	±(2.8% +5)
AC Current	60.00A - 600A	±(1.5% +10)
DC Voltage	600.0mV - 1000V	±(1.2% +5)
AC Voltage	6.000V - 1000V	±(1.5% +5)
Resistance	600.0Ω - 60MΩ	±(2.0% +5)
Frequency	9.999Hz - 9.99kHz	±(1.5% +6)
Capacitance	999.9nF - 100mF	±(4.0% +6)
Temperature	-20°C - 1000°C	±(3.0% +3°C)
IR Temperature	-30°C - 350°C	±(2.0% +2°C)
Duty Cycle	20.0% - 80%	±(1.2% +5)
Size	236 x 66 x 44mm	
Weight	350g	

MT766



## 600A AC CLAMP METER

TRUERMS

The MT765 is a CAT IV 600V True RMS 600A AC digital clamp meter incorporating an Infrared Thermometer. This clamp meter has a large 6000 count negative LCD display that provides fast sampling times and high accuracy measurements. The IR Thermometer has a spot ratio of 4:1 and measures temperature from -30°C to +350°C, plus there is a K-Type thermometer input for measurements up to 1000°C. The meter measures 1000V AC/DC, frequency, capacitance and resistance measurements. The VFD function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives. Added features include Relative Mode for Capacitance Zero and DCV, ACV and ACA offset adjustment, Non-Contact voltage detection, Data hold function and a built-in flashlight for dimly lit areas. Housed in a modern double moulded rubber housing with a rugged design. This meter is a useful measuring tool for electricians, maintenance and HVAC environments.

### Features

- 6000 count negative LCD display
- Ø33mm Cable Clamp size
- Measurement of DC voltage and AC voltage up to 1000V
- Capacitance to 10mF
- Temperature measurement from -20°C to 1000°C
- IR Temperature Spot Ratio 4:1 & measurement from -30°C to 350°C
- VFD - Variable Frequency Drive voltage value
- NCV - Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Max, Min and Data Hold function
- Auto Power Off



Function	Range	Accuracy
Jaw Size	33mm	
AC Current	60.0A - 600A	±(2.5% +8)
DC Voltage	600.0mV - 1000V	±(0.8% +5)
AC Voltage	6.000V - 1000V	±(1.5% +5)
Resistance	600.0Ω - 60MΩ	±(2.0% +5)
Frequency	9.999Hz - 9.99kHz	±(1.5% +6)
Capacitance	999.9nF - 10mF	±(4.0% +6)
Temperature	-20°C - 1000°C	±(3.0% +3°C)
IR Temperature	-30°C - 350°C	±(2.0% +2°C)
Duty Cycle	20.0% - 80%	±(1.2% +5)
Size	239 x 66 x 44mm	
Weight	350g	

MT765



TRUE RMS



MT710

## 600A AC CLAMP METER



The MT710 is a CAT III 600V, 4000 count True RMS 600A AC digital clamp meter with indication on a large backlit LCD display, providing fast sampling time with high accuracy. The Smart mode, "AUTO", is a function that automatically identifies DC voltage, AC voltage, resistance and continuity and automatically displays the measurements. By pressing the NCV button continuously the LCD displays "EF" and will display "----" when voltage is detected and the buzzer sounds. The meter measures 600V AC/DC, frequency, resistance measurements, plus Inrush current and Peak Voltage value. Other features include, Data hold function and a built-in flashlight for dimly lit areas. Housed in a modern compact housing ideal for electricians, HVAC technicians and students studying electrical.

### Features

- 4000 count backlit LCD display
- Ø25mm Cable Clamp size
- Smart Mode automatically identifies DCV, ACV, Resistance and continuity
- Measurement of DC voltage and AC voltage up to 600V
- INRUSH Current Measurements
- NCV – Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer
- Peak Mode and Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw Size	25mm	
AC Current	4.000A – 600A	±(2.5% +8)
DC Voltage	4.000V – 600V	±(0.5% +3)
AC Voltage	4.000V – 600V	±(1.0% +3)
Resistance	4.000KΩ – 40MΩ	±(0.5% +3)
Frequency	4.000Hz – 100KHz	±(1.0% +2)
Size	172 x 64 x 32mm	
Weight	172g	

TRUE RMS



MT715

## 200A AC CLAMP METER



The MT715 is a CAT IV 600V, 6000 count True RMS 200A AC digital clamp meter with indication on a large backlit negative LCD display, with a clamp jaw opening of 16mm. This open jaw clamp meter is designed to assist in the ease of measuring current in crowded or tight cable areas, as the jaws need only be pushed over the wire to obtain accurate readings. The meter measures 1000V AC/DC, capacitance and resistance measurements, plus a Min and Max mode. The Low Z range function has a low pass filter to eliminate errors caused by "Ghost" voltages, and has features of Non-Contact Voltage detection, diode test function, a continuity buzzer and a built-in flashlight. Housed in a modern double moulded rubber housing with a rugged design for heavy duty use.

### Features

- 6000 count negative LCD display
- Open Jaw Sensor
- Ø16mm Cable Clamp size
- Measures DC voltage and AC voltage up to 1000V
- Capacitance to 4000µF
- Temperature measurement -40°C to 1000°C
- NCV – Non-Contact Voltage Detector
- Low input impedance prevents false readings due to "Ghost" voltage (LoZ)
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Min/Max and Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw Size	16mm Open	
AC Current	200.0A	±(3.0% +5)
DC Voltage	6.000V – 1000V	±(1.0% +2)
AC Voltage	6.000V – 1000V	±(1.2% +2)
Resistance	600.0Ω – 60MΩ	±(1.5% +4)
Frequency	9.999Hz – 99.99MHz	±(1.2% +5)
Capacitance	60.00nF – 4000µF	±(3.0% +5)
Temperature	-40°C – 1000°C	±(1.5% +5°C)
Size	250 x 78 x 40mm	
Weight	350g	



MT700

## 200A AC CLAMP METER



The MT700 is a CAT IV 600V, 2000 count 200A AC digital clamp meter with indication on a large backlit negative LCD display, with a clamp jaw opening of 16mm. A superb feature for electricians is the ability to simultaneously measure current and voltage and view both readings on the LCD display. The MT700 measures AC and DC voltage up to 1000V and displays the reading on both the LED and LCD displays. This open jaw clamp meter is designed to assist in the ease of measuring current in crowded or tight cable areas, as the jaws need only be pushed over the wire to obtain accurate readings. Added features include resistance measurements, Rotary Field Indication, continuity buzzer, data hold, built-in flashlight plus Non-Contact Voltage detection. Housed in a modern double moulded rubber housing with a rugged design for heavy duty use.

### Features

- 2000 count negative LCD display
- Open Jaw Sensor
- Ø16mm Cable Clamp size
- Simultaneously displays voltage and current measurements
- Measures DC voltage and AC voltage up to 1000V on LCD
- LED indication of AC and DC voltage from 12V to 1000V
- Resistance measurement to 2000Ω
- Rotary Field Indication
- NCV – Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw Size	16mm Open	
AC Current	200A	±(3.5% +5)
DC Voltage LCD	6V – 1000V	±(3.0% +5)
AC Voltage LCD	6V – 1000V	±(3.0% +5)
DC Voltage LED	12V – 1000V	Complies with EN 61243-3:2014
AC Voltage LED	12V – 1000V	Complies with EN 61243-3:2014
Resistance	0Ω – 2000Ω	±(5.0% +10)
Rotary Field Indication	100V – 1000V LED	
Size	250 x 78 x 40mm	
Weight	350g	



# AC CLAMP METERS



## 1000A AC CLAMP METER

The MT770 is a CAT IV 600V, 6000 count True RMS 1000A AC digital clamp meter with indication on a large backlit LCD display, providing fast sampling time with high accuracy. The meter measures 1000V AC/DC, temperature, frequency, capacitance and resistance measurements, plus 100ms Inrush current and Peak Voltage value. The VFD function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives, while the Low Z range function has a low pass filter to eliminate errors caused by "Ghost" voltages. Added features include Relative mode for Capacitance Zero and DCV, ACV and ACA offset adjustment, Non-Contact voltage detection, Data hold function and a built-in flashlight for dimly lit areas. Housed in a modern double moulded rubber housing.

### Features

- 6000 count backlit LCD display
- Ø33mm Cable Clamp size
- Measurement of DC voltage and AC voltage up to 1000V
- Capacitance to 100mF
- Temperature measurement from -20°C to 1000°C
- INRUSH Current Measurements
- VFD - Variable Frequency Drive voltage value
- LoZ - Low impedance mode prevents false readings due to "Ghost" voltage
- NCV - Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Peak Mode and Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw Size	33mm	
AC Current	600.0A - 1000A	±(2.5% +8)
DC Voltage	600.0mV - 1000V	±(1.5% +2)
AC Voltage	6.000V - 1000V	±(1.5% +5)
LoZ AC Voltage	6.000V - 300V	±(3.0% +40)
Resistance	600.0Ω - 60MΩ	±(1.5% +2)
Frequency	9.999Hz - 99.99kHz	±(1.2% +5)
Capacitance	60.00nF - 100mF	±(3.0% +5)
Temperature	-20°C - 1000°C	±(3.0% +5°C)
Duty Cycle	10.0% to 90%	±(1.2% +2)
Size	230 x 66 x 44mm	
Weight	350g	

TRUERMS



MT770

## 600A AC CLAMP METER

The MT730 is a CAT III 600V, 6000 count True RMS 600A AC digital clamp meter with indication on a large backlit LCD display, providing fast sampling time with high accuracy. The meter measures 1000V AC/DC, temperature, frequency, capacitance and resistance measurements, plus 100ms Inrush current and Peak Voltage value. The VFD function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives. Added features include Relative mode for Capacitance Zero and DCV, ACV and ACA offset adjustment, Non-Contact voltage detection, Data hold function and a built-in flashlight for dimly lit areas. Housed in a modern double moulded rubber housing.

### Features

- 6000 count backlit LCD display
- Ø33mm Cable Clamp size
- Measurement of DC voltage and AC voltage up to 1000V
- Capacitance to 100mF
- Temperature measurement from -20°C to 1000°C
- INRUSH Current Measurements
- VFD - Variable Frequency Drive voltage value
- NCV - Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Peak Mode and Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw Size	33mm	
AC Current	60.00A - 600A	±(2.0% +8)
DC Voltage	6.000V - 1000V	±(1.0% +3)
AC Voltage	6.000V - 1000V	±(1.2% +5)
Resistance	600.0Ω - 60MΩ	±(1.5% +2)
Frequency	10Hz - 100kHz	±(1.0% +5)
Capacitance	99.00nF - 100mF	±(3.0% +5)
Temperature	-20°C - 1000°C	±(3.0% +3°C)
Duty Cycle	20.0% to 80%	±(1.2% +10)
Size	239 x 72 x 40mm	
Weight	318g	

TRUERMS



MT730

## 400A AC CLAMP METER

The MT720 is a CAT III 600V, 4000 count True RMS 400A AC digital clamp meter with indication on a large backlit LCD display, providing fast sampling time with high accuracy. The meter measures 1000V AC/DC, temperature, frequency, capacitance and resistance measurements, plus 100ms Inrush current and Peak Voltage value. The VFD function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives. Added features include Relative mode for Capacitance Zero and DCV, ACV and ACA offset adjustment, Non-Contact voltage detection, Data hold function and a built-in flashlight for dimly lit areas. Housed in a modern double moulded rubber housing.

### Features

- 4000 count backlit LCD display
- Ø30mm Cable Clamp size
- Measurement of DC voltage and AC voltage up to 1000V
- Capacitance to 100mF
- Temperature measurement from -20°C to 1000°C
- INRUSH Current Measurements
- VFD - Variable Frequency Drive voltage value
- NCV - Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Peak Mode and Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw Size	30mm	
AC Current	40.00A - 400A	±(2.0% +8)
DC Voltage	4.000V - 1000V	±(1.0% +3)
AC Voltage	4.000V - 1000V	±(1.2% +5)
Resistance	400.0Ω - 40MΩ	±(1.5% +2)
Frequency	10Hz - 100kHz	±(1.0% +5)
Capacitance	99.00nF - 100mF	±(3.0% +5)
Temperature	-20°C - 1000°C	±(3.0% +3°C)
Duty Cycle	20.0% to 80%	±(1.2% +10)
Size	220 x 80 x 39mm	
Weight	305g	

TRUERMS



MT720



K2002PA

## 2000A AC CLAMP METER

The K2002PA is a CAT III 600V, 4000 count 2000A AC digital clamp meter, with a tear drop clamp jaw size of 55mm. This tear drop jaw is designed to assist in the ease of measuring current in crowded cable areas. The meter is a valuable tool for electrical engineers and electrical contractors as it has a wide frequency response and features peak hold that allows the user to measure peak values of current.

### Features

- 4000 count backlit LCD display
- Ø55mm Cable Clamp size
- Measurement of AC Current up to 2000A
- Measurement of AC/DC Voltage up to 1000V
- Resistance to 400kΩ
- Peak Hold
- Data Hold
- Continuity Buzzer and Diode Test
- Auto Power Off



Function	Range	Accuracy
Jaw size	55mm	
AC Current	0A - 2000A	±(1.0% +3)
DC Voltage	40V - 1000V	±(1.0% +2)
AC Voltage	40V - 1000V	±(1.0% +2)
Resistance	400Ω - 400KΩ	±(1.5% +2)
Size	247 x 105 x 49mm	
Weight	470g	

**TRUERMS**



K2007R

## 1000A AC CLAMP METER

The lightweight, compact K2007R features three functions in one unit; True-RMS AC current, True RMS AC voltage and resistance. It can measure AC current to 1000A and AC/DC voltage up to 600V. It measures 6kΩ resistance, an audible continuity test with continuity buzzer for rapid circuit fault diagnosis. The K2007R also offers frequency response from 40Hz to 400Hz on AC current and voltage ranges.

### Features

- Large LCD display
- Ø33mm Cable Clamp size
- Measurement of AC Current up to 1000A
- Measurement of AC/DC Voltage up to 600V
- Resistance to 6KΩ
- Data Hold
- Continuity Buzzer
- Auto Power Off



Function	Range	Accuracy
Jaw size	33mm	
AC Current	600A - 1000A	±(1.5% +5)
DC Voltage	0.0V - 600V	±(1.0% +3)
AC Voltage	0.0V - 600V	±(1.3% +4)
Resistance	0Ω - 6KΩ	±(1.0% +5)
Size	204 x 81 x 36mm	
Weight	220g	

## 120A AC CLAMP ADAPTOR

The K8112 clamp adaptor with a small conductor size of 8mm is designed to be an AC current/voltage conversion probe capable of measuring AC current from 0.1mA to 120A in conjunction with high sensitivity AC voltmeters, especially useful with digital multimeters. Simple to operate, the unit has range switch position at 200mA, 2A and 20A. currents. The adaptor has a wide frequency range from DC to 1kHz.

### Features

- Jaw Ø8mm
- Measures AC Current to 120A
- Easy to use
- Range switch position at 200mA, 2A and 20A



Function	Range	Accuracy
Jaw size	8mm	
AC Current	200mA - 120A	±(1.5% + 0.2mA)
AC current resolution	0.1mA	
AC Bandwidth	40Hz to 10kHz	
Size	147 x 58 x 26mm	
Weight	100g	



K8112



# AC CLAMP METERS



## 3000A AC CLAMP METER

The K2210R 3000A AC Flexible Current True RMS Clamp Meter is ergonomically designed for ease of use in confined spaces. The 55mm flexible coil can easily fit around flat busbar or parallel supply cables and can also be maneuvered into cable trays where conventional hard jaw clamps cannot reach. The unit features a large backlit LCD display making it easier to read measurements in dimly lit areas.

### Features

- AC Current True RMS measurements
- 3149 Count Backlit LCD display
- Ø150mm Cable Clamp size
- Measurement of AC Current up to 3000A AC
- Data Hold
- Min/Max function
- Auto Power Off

Function	Range	Accuracy
Conductor Size	Ø150mm	
Jaw Size	55mm	
AC Current	0.1A ~ 3000A	± (3.0% +5d)
Crest Factor	Full scale CF<1.6 Half scale CF3.2	
Influence of conductor size	± 3.0% (max)	
Overload protection	5000A AC for 10 seconds	
Battery	2x AAA	
Size	120 x 70 x 26mm	
Weight	470g	



K2210R

## 3000A AC CLAMP METER

The MT745 3000A AC Flexible Current Clamp Meter with Data Logging is ergonomically designed for ease of use in confined spaces. The 8mm flexible coil can easily fit around flat busbar or parallel supply cables and can also be maneuvered into cable trays where conventional hard jaw clamps cannot reach. The Bluetooth feature can be used to perform live recordings or to transfer recorded data to a smart phone app. Using the Log Key will start a recording that will be stored on the instrument. The smart phone app allows the user to retrieve Data as well as set up recording sample rate. The unit features inrush current measurement as well as frequency measurement and has a large backlit LCD display making it easier to read measurements.

### Features

- AC current True RMS measurements
- 3000 count Backlight LCD
- Analogue Bar graph
- Bluetooth interface
- 3000A AC flexible clamp
- Data Hold
- Inrush Current
- Frequency Measurement

Function	Range	Accuracy
Conductor Size	Ø150mm	
Influence of conductor size	± 2.0% (max)	
AC Current	0.5A to 3000A AC	±(3% ± 5 digits)
Frequency	50Hz – 400Hz	
Operation Temperature	5 to 40°C	
Size	230 x 76 x 40mm	
Weight	315g	



MT745

## 3000A AC CLAMP ADAPTOR

The MT740 is a 3000A True RMS AC Flex Clamp adaptor that supplies voltage output to universal voltage meters. With a 7.5mm coil diameter to accommodate ease of measurement in a tight space and is ergonomically designed for one handed operation. The MT740 Flex Clamp Adaptor is CAT IV rated 600V and CAT III rated for 1000V.

### Features

- 457mm (18") head cable length
- 3000A AC current measurement
- 7.5mm coil diameter
- Slide switch range change
- Low battery LED indicator
- Ergonomically designed

Function	Range	Accuracy
Jaw Size	185mm	
AC Current	30A- 3000A	±(3.0% + 5mA)
Output	3000A@1mV/A 300A@10mV/A 30A@100mV/A	
AC Bandwidth	50Hz to 60Hz	
Size	180 x 106 x 28mm	
Weight	210g	



MT740

**TRUE RMS**



MTD73A

## 800A AC CLAMP METER



The MTD73A True RMS 800A AC Clamp Meter is a useful tool that allows you to safely test for electrical problems, motor's condition and current on appliances. Equipped to test any electrical circuit without disconnecting any wires. Handy function includes a backlit LCD display and Flashlight for working in dimly lit areas. The NCV Non-Contact Voltage detector is useful for a quick check to see if voltage is present on circuit under test. It comes with a 28mm Jaw opening and measures 0.001A to 800A AC, 0.1mV to 600V AC/DC, Temperature, Capacitance, Frequency, Resistance, Continuity buzzer and Diode Test.

### Features

- Measures AC Current to 800A
- Measures AC & DC Voltage to 600V
- Temperature measurement -40°C to 1000°C
- Resistance to 40MΩ
- Frequency to 10MHz
- Capacitance to 40mF
- 28mm conductor size
- 4000 count LCD display with backlight
- Continuity and buzzer test
- Data hold and Duty Cycle function
- Non-Contact Voltage
- Auto power off
- Low battery indication

Function	Range	Accuracy
Jaw Size	28mm	
AC Current	4A – 800A	±(3.0% +5)
DC Voltage	400mV – 600V	±(0.5% +5)
AC Voltage	4V – 600V	±(1.0% +5)
Resistance	400Ω – 40MΩ	±(2.0% +30)
Frequency	10Hz – 10MHz	±(0.5% +4)
Capacitance	4nF – 40mF	±(2.5% +5)
Temperature	-40°C – 1000°C	±(1.0% +5°C)
Size	185 x 65 x 37mm	
Weight	180g	

**TRUE RMS**



MTD70T

## 600A AC CLAMP METER



The MTD70T True RMS 600A AC Clamp Meter is a useful tool that allows you to safely test for electrical problems, motor's condition and current on appliances. Equipped to test any electrical circuit without disconnecting any wires. Handy features include a backlit LCD display and flashlight for working in dimly lit areas. The NCV Non-Contact Voltage detector is useful for a quick check to see if voltage is present on circuit under test. It comes with a 28mm Jaw opening and measures 0.001A to 600A AC, DC and AC Volt, Resistance, Continuity buzzer and Diode Test.

### Features

- Measures AC Current to 600A
- Measures AC & DC Voltage to 600V
- Resistance to 20MΩ
- 28mm conductor size
- 2000 count LCD display with backlight
- Continuity and buzzer test
- Data hold functions
- Non-Contact Voltage
- Auto power off
- Low battery indication

Function	Range	Accuracy
Jaw Size	28mm	
AC Current	2A – 600A	±(2.0% +5)
DC Voltage	200mV – 600V	±(0.5% +5)
AC Voltage	200mV – 600V	±(1.0% +5)
Resistance	200Ω – 20MΩ	±(0.8% +1)
Size	185 x 65 x 37mm	
Weight	180g	



MTD15

## 400A AC/DC CLAMP METER



MTD15 is a cost effective 400A AC Clamp Meter and has been developed for commercial, light, industrial, HVAC, residential and DIY applications. The MTD15 is a useful tool that allows you to safely test for electrical problems, motor's condition and current on appliances. Equipped to test any electrical circuit without disconnecting any wires. Measures 0.001A to 400A AC, DC Volt, Resistance, Continuity buzzer, 23mm Jaw opening and includes carrying case.

### Features

- 5 functions & 19 versatile ranges
- Measures AC Current to 400A
- Measures AC & DC Voltage to 600V
- Resistance to 20MΩ
- 2000 count LCD display with backlight
- Jaw size Ø23mm
- Continuity and buzzer test
- Diode check / Data hold

Function	Range	Accuracy
Jaw Size	23mm	
AC Current	2A – 400A	±(2.0% +6)
DC Voltage	200mV – 600V	±(1.0% +5)
AC Voltage	200mV – 600V	±(2.0% +5)
Resistance	200Ω – 20MΩ	±(2.0% +5)
Size	200 x 70 x 37mm	
Weight	200g	



# AC/DC CLAMP METERS



## 1000A AC/DC CLAMP METER



The MT777 is a CAT IV 600V, 6000 count True RMS 1000A AC/DC digital clamp meter with an analogue bargraph indication on a TFT colour display, providing fast sampling time with high accuracy. The meter has a built in Data logger with 100 Graph Data review, using Bluetooth, the meter wirelessly transmits data to the Android or iOS mobile App allowing the user to view, save, organise and share recordings. The VFD function allows the user to measure stable voltage in high frequency applications, while the Low Z range function has a low pass filter to eliminate errors caused by "Ghost" voltages. The 100ms Inrush current detects starting up currents of electric motors, input surge current, or switch-on surge currents, this is the maximum instantaneous input current drawn by an electrical device when first turned on. The meter measures 1000V AC/DC, temperature, frequency, capacitance and resistance measurements plus Peak Hold. Using the optional MT740 True RMS Flexible Clamp Adaptor, the measuring range can be extended to measure 3000A AC. Added features is Non-Contact voltage detection, data hold function and a built-in flashlight for dimly lit areas.

### Features

- 6000 count TFT colour LCD display
- Ø33mm Cable Clamp size
- Measurement of AC, AC+DC TRMS and DC voltage up to 1000V
- Capacitance to 100mF
- Temperature measurement from -40°C to 1000°C
- Trend Capture Function
- 100 Graph Data Review
- INRUSH Current Measurements
- 3000A range for optional MT740 Flex Clamp Adaptor
- VFD - Variable Frequency Drive voltage value
- LoZ - Low impedance mode prevents false readings due to "Ghost" voltage
- NCV - Non-Contact Voltage Detector
- Continuity buzzer and Diode Test
- Peak Mode, Min/Max and Data Hold function
- Built-in Flashlight and Auto Power Off

Function	Range	Accuracy
Jaw Size	33mm	
DC Current	600.0A - 1000A	±(2.5% +5)
AC Current	600.0A - 1000A	±(2.5% +5)
Flexible Coil Current	30.00A - 3000A	±(3.0% +5)
DC Voltage	600.0mV - 1000V	±(1.5% +5)
AC Voltage	6.000V - 1000V	±(1.5% +5)
LoZ AC Voltage	6.000V - 300V	±(3.0% +40)
AC+DC TRMS Voltage	6.000V - 1000V	±(2.5% +20)
Resistance	600.0Ω - 60MΩ	±(1.5% +5)
Frequency	9.999Hz - 99.99kHz	±(1.2% +5)
Capacitance	60.00nF - 100mF	±(3.0% +8)
Temperature	-40°C - 1000°C	±(1.5% +5°C)
Duty Cycle	10.0% to 90%	±(1.2% +8)
Size	230 x 66 x 44mm	
Weight	350g	



MT777

## 1000A AC/DC CLAMP METER



The MT775 is a CAT IV 600V, 6000 count True RMS 1000A AC/DC digital clamp meter with indication on a large backlit LCD display, providing fast sampling time with high accuracy. The meter measures 1000V AC/DC, temperature, frequency, capacitance and resistance measurements, plus 100ms Inrush current and Peak Voltage value. The VFD function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives, while the Low Z range function has a low pass filter to eliminate errors caused by "Ghost" voltages. Added features include Relative mode for DCA and Capacitance Zero and offset adjustment, Non-Contact voltage detection, data hold function and a built-in flashlight for dimly lit areas. Housed in a modern double moulded rubber housing.

### Features

- 6000 count backlit LCD display
- Ø33mm Cable Clamp size
- Measurement of DC voltage and AC voltage up to 1000V
- Capacitance to 100mF
- Temperature measurement from -20°C to 1000°C
- INRUSH Current Measurements
- VFD - Variable Frequency Drive voltage value
- LoZ - Low impedance mode prevents false readings due to "Ghost" voltage
- NCV - Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Peak Mode and Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw Size	33mm	
DC Current	600.0A - 1000A	±(2.5% +5)
AC Current	600.0A - 1000A	±(2.5% +8)
DC Voltage	600.0mV - 1000V	±(1.5% +2)
AC Voltage	6.000V - 1000V	±(1.5% +5)
LoZ AC Voltage	6.000V - 300V	±(3.0% +40)
Resistance	600.0Ω - 60MΩ	±(1.5% +2)
Frequency	9.999Hz - 99.99kHz	±(1.2% +5)
Capacitance	60.00nF - 100mF	±(3.0% +5)
Temperature	-20°C - 1000°C	±(3.0% +5°C)
Duty Cycle	10.0% to 90%	±(1.2% +5)
Size	230 x 66 x 44mm	
Weight	350g	



MT775

## 400A AC/DC CLAMP METER



The MT723 is a CAT III 600V, 4000 count True RMS 400A AC/DC digital clamp meter with indication on a large backlit LCD display, providing fast sampling time with high accuracy. The meter measures 1000V AC/DC, temperature, frequency, capacitance and resistance measurements, plus 100ms Inrush current and Peak Voltage value. The VFD function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives. Added features include Relative mode for Capacitance Zero and DCV, ACV and ACA offset adjustment, Non-Contact voltage detection, data hold function and a built-in flashlight for dimly lit areas. Housed in a modern double moulded rubber housing.

### Features

- 4000 count backlit LCD display
- Ø30mm Cable Clamp size
- Measurement of DC voltage and AC voltage up to 1000V
- Capacitance to 100mF
- Temperature measurement from -20°C to 1000°C
- INRUSH Current Measurements
- VFD - Variable Frequency Drive voltage value
- NCV - Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Peak Mode and Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw Size	30mm	
DC Current	40.00A - 400A	±(2.0% +8)
AC Current	40.00A - 400A	±(2.0% +8)
DC Voltage	4.000V - 1000V	±(1.0% +3)
AC Voltage	4.000V - 1000V	±(1.2% +5)
Resistance	400.0Ω - 40MΩ	±(1.5% +2)
Frequency	10Hz - 100kHz	±(1.0% +5)
Capacitance	99.00nF - 100mF	±(3.0% +5)
Temperature	-20°C - 1000°C	±(3.0% +3°C)
Duty Cycle	20.0% to 80%	±(1.2% +10)
Size	220 x 80 x 39mm	
Weight	305g	



MT723

**TRUE RMS**



K2056R

## 1000A AC/DC CLAMP METER

The K2056R is one of the first meters designed to meet international safety standard IEC 61010-1 CAT IV 600V to meet the demands for measuring voltage and current spikes. As electrical distribution systems become more complex, the chances of voltage spikes are always increasing, and these spikes are superimposed to normal mains voltage waveform. The instrument is not purposely designed to withstand these high voltage spikes, it will blow and a potential arc blast can create a life threatening situation for the end user. The K2056R is a digital clamp meter with the capability to read current up to 1000A AC/DC. The K2056R model features the ability to utilize True RMS measurements, providing greater accuracy on non-sinusoidal waveforms, thus useful for power distribution companies, power utilities and maintenance fields.

### Features

- 6039 count backlit LCD display with 61 segment bargraph
- Ø40mm Cable Clamp size
- Measurement of AC/DC Current up to 1000A
- Measurement of AC/DC voltage up to 600V
- Temperature Measurement -50°C to 700°C
- Capacitance to 4mF
- Resistance to 60MΩ
- Frequency Measurement to 10kHz
- Continuity Buzzer and Diode Test
- Peak Hold and Data Hold
- Relative Mode, MIN/MAX recording mode
- Double Moulded housing provides comfortable palm grip



Function	Range	Accuracy
Jaw size	40mm	
DC Current	600A - 1000A	±(1.5% +5)
AC Current	600A - 1000A	±(2.0% +5)
DC Voltage	600mV - 600V	±(1.0% +3)
AC Voltage	6V - 600V	±(1.5% +4)
Resistance	600Ω - 60MΩ	±(1.5% +5)
Frequency	1Hz - 10kHz	±(0.5% +5)
Capacitance	40nF - 4000μF	±(2.5% +20)
Temperature	-50°C to 700°C	±(5.0°C +3)
Duty Cycle	0.1 to 99.9%	±(2.5% +5)
Size	254 x 82 x 36mm	
Weight	310g	



K2055

## 1000A AC/DC CLAMP METER

The K2055 is a CAT IV rated clamp meter with 40mm jaw size that can measure voltage and current in both low and high-powered circuits and has the ability to read up to 1000A AC/DC and 600V AC/DC. Included is a Non-Contact voltage detector giving the user warning of the presence of AC Voltage. Part of the K2056R family, this meter is one of the first meters designed to meet international safety standard IEC 61010-1 CAT IV 600V to meet the demands for measuring voltage and current spikes.

### Features

- 6039 count backlit LCD display with 61 segment bargraph
- Ø40mm Cable Clamp size
- Measurement of AC/DC Current up to 1000A
- Measurement of AC/DC Voltage up to 600V
- Resistance to 60MΩ
- Frequency Measurement to 10kHz
- Continuity Buzzer and Diode Test
- Data Hold
- Relative Mode, MIN/MAX recording mode
- Double Moulded housing provides comfortable palm grip
- Auto Power Off



Function	Range	Accuracy
Jaw size	40mm	
DC Current	600A - 1000A	±(1.5% +5)
AC Current	600A - 1000A	±(2.0% +5)
DC Voltage	600mV - 600V	±(1.0% +3)
AC Voltage	6V - 600V	±(1.3% +4)
Resistance	600Ω - 60MΩ	±(1.0% +5)
Frequency	1Hz - 10kHz	±(0.5% +5)
Duty Cycle	0.1 to 99.9%	±(2.5% +5)
Size	254 x 82 x 36mm	
Weight	310g	

**TRUE RMS**



K2046R

## 600A AC/DC CLAMP METER

The K2046R digital clamp-meter is a True RMS sensing, auto-ranging multimeter for measuring current, voltage, capacitance, frequency, and resistance in electrical testing applications. It has a clamp that measures ACA and DCA to 600A. The Red LED indicates the presence of AC voltage, this NCV is a safety function for the user. This meter is of the same family as the K2056R being one of the first meters designed to meet international safety standard IEC 61010-1 CAT IV 600V to meet the demands for measuring voltage and current spikes. Ideally suited for power distribution companies, power utilities and maintenance fields.

### Features

- 6039 count backlit LCD display with 61 segment bargraph
- Ø33mm Cable Clamp size
- Measurement of AC/DC Current up to 600A
- Measurement of AC/DC voltage up to 600V
- Temperature Measurement -50°C to 700°C
- Capacitance to 4mF
- Resistance to 60MΩ
- Frequency Measurement to 10kHz
- Continuity Buzzer and Diode Test
- Peak Hold and Data Hold
- Relative Mode, MIN/MAX recording mode
- Double Moulded housing provides comfortable palm grip



Function	Range	Accuracy
Jaw size	33mm	
DC Current	0A - 600A	±(1.5% +5)
AC Current	0A - 600A	±(2.0% +5)
DC Voltage	600mV - 600V	±(1.0% +3)
AC Voltage	6V - 600V	±(1.5% +4)
Resistance	600Ω - 60MΩ	±(1.5% +5)
Frequency	1Hz - 10kHz	±(0.5% +5)
Capacitance	40nF - 4000μF	±(2.5% +20)
Temperature	-50°C to 700°C	±(5.0°C +3)
Duty Cycle	0.1 to 99.9%	±(2.5% +5)
Size	243 x 77 x 36mm	
Weight	300g	



# AC/DC CLAMP METERS



## 2000A AC/DC CLAMP METER

The K2009R is designed for superior performance, value and has been redesigned to meet the IEC 61010 Safety Regulations. The new custom designed LCD has a maximum of 4000 counts, and has microprocessor controlled annunciators and the decimal point. The K2009R is a True RMS clamp meter and offers a unique feature with the LoHz mode which automatically selects a lower sample rate in low frequency measurement to reduce the fluctuations of display readings. The average mode allows easy reading of fluctuating voltages and currents.

### Features

- 4000 count backlit LCD display
- Ø55mm Cable Clamp size
- Measurement of AC/DC Current up to 2000A
- Measurement of DC voltage up to 1000V and AC voltage up to 750V
- Resistance to 4000Ω
- Frequency to 4000Hz
- Microprocessor DCA zero adjustment
- Provides Recorder Output for long hour monitoring
- Duty Cycle and Continuity Buzzer
- Auto Power Off

Function	Range	Accuracy
Jaw size	55mm	
DC Current	400A - 2000A	±(1.3% +2)
AC Current	400A - 2000A	±(1.3% +3)
DC Voltage	40V - 1000V	±(1.0% +2)
AC Voltage	40V - 750V	±(1.0% +2)
Resistance	400Ω - 4000Ω	±(1.5% +2)
Frequency	1000 Hz - 4000Hz	±(1.5% +5)
Duty Cycle	0.5 to 99.0%	±(1.2% +2)
Size	250 x 105 x 49mm	
Weight	540g	



TRUE RMS



K2009R

## 2000A AC/DC CLAMP METER

The K2003A is designed for superior performance, value and has been redesigned to meet the IEC 61010 Safety Regulations. The new custom designed LCD has a maximum of 4000 counts, and has microprocessor controlled annunciators and the decimal point. The K2003A is an average sensing clamp meter ideally suited for load monitoring and trouble shooting on electrical systems containing linear loads. The CAT IV 600V safety standard ensures the meter can be used in industrial environments.

### Features

- 4000 count backlit LCD display
- Ø55mm Cable Clamp size
- Measurement of AC/DC Current up to 2000A
- Measurement of DC voltage up to 1000V and AC voltage up to 750V
- Resistance to 4000Ω
- Microprocessor DCA zero adjustment
- Provides Recorder Output for long hour monitoring
- Continuity Buzzer
- Auto Power Off

Function	Range	Accuracy
Jaw size	55mm	
DC Current	400A - 2000A	±(1.5% +2)
AC Current	400A - 2000A	±(1.5% +2)
DC Voltage	400V - 1000V	±(1.0% +2)
AC Voltage	400V - 750V	±(1.5% +2)
Resistance	400Ω - 4000Ω	±(1.5% +2)
Size	250 x 105 x 49mm	
Weight	540g	



K2003A

## 100A AC/DC CLAMP METER

The K2300R is a CAT III 300V, 1049 count True RMS 100A AC/DC digital clamp meter, with a clamp jaw opening of 10mm. This open jaw clamp meter is designed to assist in the ease of measuring current in crowded or tight cable areas, as the jaws need only be pushed over the wire to obtain accurate readings. The meter has a Non-Contact Voltage detection, diode and is housed in a rugged design for heavy duty use.

### Features

- 1049 count negative LCD display
- Open Jaw Sensor
- Ø10mm Cable Clamp size
- Measures DC Current and AC Current up to 100A
- NCV - Non-Contact Voltage Detector
- Microprocessor DCA Zero
- Data Hold function
- Auto Power Off

Function	Range	Accuracy
Jaw size	10mm Open Jaw	
DC Current	0A - 100A	±(2.0% +5)
AC Current	0A - 100A	±(2.0% +5)
Size	161.3 x 40.2 x 30.3mm	
Weight	110g	



TRUE RMS



K2300R



K2031

## 200A AC CLAMP METER

The K2031 is a CAT III 300V, 4000 count 200A AC digital clamp meter, with a clamp jaw size of 24mm. This mini clamp meter is the ideal pocket-sized dedicated clamp meter and has a resolution of 10mA. Features include a one-handed operation rotary range selector and power switch, data hold and auto power off for extended battery life.

### Features

- 4000 count LCD display
- Ø24mm Cable Clamp size
- Measures AC Current up to 200A
- AC current resolution 0.01A
- Frequency response from 40Hz to 1kHz on AC current
- Data Hold



Function	Range	Accuracy
Jaw size	24mm	
AC Current	200A	±(2.0% +5)
Digital Display	4000	
AC Bandwidth	40Hz to 1KHz	
Size	147 x 59 x 25mm	
Weight	100g	



MT760

## 100A AC/DC CLAMP METER

The MT760 is a CAT III 300V, 2000 count True RMS 100A AC/DC digital clamp meter with a resolution of 1mA. The MT760 has a compact design, high reliability and safety, and provides fast sampling time with high accuracy and all readings are indicated on a large backlit LCD display. The meter measures 600V AC/DC, capacitance, resistance measurements, plus a continuity buzzer and diode test function. The VFC function allows the user to measure stable voltage in high frequency applications of Variable Frequency Drives. Added features include Zero/Relative mode for Capacitance Zero, resistance, DCV, ACV, DCA and ACA offset adjustment and Non-Contact voltage detection. Housed in a modern double moulded rubber housing.

### Features

- Current measurement from 1mA
- Measures AC and DC current to 100 Amps
- Ø17mm Cable Clamp size
- 2000 count backlit LCD display
- Measurement of DC voltage and AC voltage up to 600V
- Capacitance to 20mF
- VFC - Variable Frequency Drive voltage value
- Microprocessor Zero adjustment
- NCV - Non-Contact Voltage Detector
- Continuity buzzer and Diode Test
- Data Hold function
- Auto Power Off



Function	Range	Accuracy
Jaw Size	17mm	
DC Current	2.000A - 100A	±(2.0% +3)
AC Current	2.000A - 100A	±(2.5% +8)
DC Voltage	200.0mV - 600V	±(0.7% +3)
AC Voltage	2.000V - 600V	±(1.0% +3)
Resistance	200.0Ω - 20MΩ	±(1.0% +2)
Capacitance	2.000nF - 20mF	±(4.0% +5)
Size	175 x 60 x 34mm	
Weight	170g	



MTD75T

## 800A AC/DC CLAMP METER

The MTD75T True RMS 800A AC/DC Clamp Meter is a useful tool that allows you to safely test for electrical problems, motor's condition and current on appliances. Equipped to test any electrical circuit without disconnecting any wires. Handy function includes a backlit LCD display and Flashlight for working in dimly lit areas. The NCV Non-Contact Voltage detector is useful for a quick check to see if voltage is present on circuit under test. It has a 28mm Jaw opening and measures 0.01A to 800A AC & DC, 0.1mV to 600V AC/DC, Temperature, Capacitance, Frequency, Resistance, Continuity buzzer and Diode Test.

### Features

- Measures AC & DC Current, AC Voltage, DC Voltage, Temperature, Capacitance, Frequency and Resistance
- Measures current to 800 Amps without breaking the circuit
- Resolution to 1A AC and DC Current
- 28mm conductor size
- 6000 count LCD display with backlight
- Continuity and buzzer test
- Data hold and Duty Cycle function
- Auto power off
- Low battery indication



Function	Range	Accuracy
Jaws Size	28mm	
DC Current	60A - 800A	±(1.5% +5)
AC Current	60A - 800A	±(1.5% +5)
DC Voltage	600mV - 600V	±(0.5% +5)
AC Voltage	6V - 600V	±(0.8% +5)
Resistance	600Ω - 60MΩ	±(0.8% +1)
Frequency	10Hz - 10MHz	±(0.5% +4)
Capacitance	6nF - 60mF	±(2.5% +5)
Temperature	-40°C - 1000°C	±(1.0% +5°C)
Size	185 x 65 x 37mm	
Weight	180g	



MT713

## 600A AC/DC CLAMP METER

The MT713 is a CAT IV 600V, 6000 count True RMS 600A AC/DC digital clamp meter with indication on a large backlit LCD display, providing fast sampling time with high accuracy. The Smart mode, "AUTO", is a function that automatically identifies DC voltage, AC voltage, Resistance and continuity and automatically displays the measurements. There is a built-in Non-Contact voltage detector, by pressing the NCV button continuously the LCD displays "EF" and will display "----" when voltage is detected and the buzzer sounds. The meter measures 600V AC/DC, frequency, resistance, temperature and capacitance measurements, plus Inrush current and Peak Voltage value. Other features include a Data hold function and a built-in flashlight for dimly lit areas. Housed in a modern compact housing ideal for electricians, HVAC technicians and students studying electrical.

### Features

- 6000 count backlit LCD display
- Ø25mm Cable Clamp size
- Smart Mode automatically identifies DCV, ACV, Resistance and continuity
- Measurement of DC voltage and AC voltage up to 600V
- INRUSH Current Measurements
- NCV - Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer
- Peak Mode and Data Hold function
- Auto Power Off



Function	Range	Accuracy
Jaws Size	25mm	
DC Current	60.00A - 600A	±(2.0% +3)
AC Current	60.00A - 600A	±(2.0% +3)
DC Voltage	6.000V - 600V	±(0.5% +3)
AC Voltage	6.000V - 600V	±(1.0% +3)
Resistance	600.0Ω - 60MΩ	±(0.5% +3)
Capacitance	6.000nF - 60.00mF	±(2.0% +5)
Frequency	6.000Hz - 10MHz	±(0.1% +2)
Temperature	-30°C - 1000°C	±(2.5% +5)
Size	172 x 64 x 32mm	
Weight	172g	



# AC/DC POWER METERS



## 1000A AC POWER CLAMP

TRUE RMS

The MT790 is a Single and 3-Phase 1000 Amp True RMS AC Power Clamp Meter. This Power Clamp meter operates as a True RMS Clamp Meter, Power Meter, Multimeter and AC Voltage Detector. Measuring ranges include AC Current, Voltage, Frequency and Power including True Power, Apparent Power, Reactive Power and Active Power. Measures 1-Phase and balanced 3-Phase True Power (kW), Apparent Power (kVA), Reactive Power (kVAR) and Active Power (kWh), plus Power Factor and Phase Angle. Manually stores and recalls of up to 99 data logs. USB interface for connection to a PC for data logging function with included software.

### Features

- True RMS Clamp Meter, Power Meter and DMM
- Ø55mm Cable clamp size
- Measures AC current up to 1000 Amps
- Measures AC voltage to 750V
- USB interface for PC connection for Data Log Function
- Analysis for single phase and balanced three phase system
- Manual data memory
- KW/KVA/KVAC/Pf
- MIN/MAX and Data Hold
- Auto Power Off
- Complete with Colour Coded Test Leads
- Manually Store/Recall up to 99 Data Logs
- Large Dual LCD Display with 9999 Count and Bargraph

Function	Range	Accuracy
Jaw size	55mm	
AC Current	40A - 1000A	±(2.0% +5)
AC Voltage	100 - 750V	±(1.2% +5)
Frequency	50Hz - 200Hz	±(0.5% +5)
Temperature	-50 to 1300°C	±(5.0°C +3)
Active Energy	1-9999kWh	±(3.0% +2)
Active Power	0.01kW - 750.0kW	±(3.0% +5)
AC Bandwidth	50Hz to 60Hz	
Apparent Power	0.01KVA-750.0KVA	±(3.0% +5)
Reactive Power	0.01KVA-750.0KVA	
Power Factor	0.3-1	±(2% +20)
Size	335 x 70 x 21mm	
Weight	631g	



MT790

## 1500V DC H & W ANALYSIS CLAMP METER

TRUE RMS

The MT785 is a CAT IV 600V, 6000 count True RMS H & W analysis clamp meter that measures up to 1000A AC/DC with an analogue bargraph indication on a TFT colour display. The MT785 simultaneously measures and displays Active, Reactive and Apparent Power and Energy, and current harmonic analysis up to the 25th order with THD% calculation in a single phase. The 100ms Inrush current detects starting up currents of electric motors, input surge current, or switch-on surge currents, this is the maximum instantaneous input current drawn by an electrical device when first turned on. The meter has been designed to measure 1500V DC purposely for the Solar industry, 1000V AC, temperature, frequency, capacitance and resistance, plus the Low Z range function has a low pass filter to eliminate errors caused by "Ghost" voltages. The meter has a built in record and store function and displays trend charts, using the Bluetooth function the meter wirelessly transmits data to the Android or iOS mobile App allowing the user to view, save, organise and share recordings.

### Features

- 6000 count TFT colour LCD display
- Ø33mm Cable Clamp size
- Measurement of AC and DC current up to 1000V
- TRMS AC voltage to 1000V, DC voltage up to 1500V and AC+DC voltage measurements
- Active, Reactive, Apparent Power & Power Factor on single phase
- AC and DC Power measurements
- Energy measurements on single phase – Active, Reactive and Apparent
- Capacitance to 6000µF
- Trend Capture Function
- INRUSH Current Measurements
- AC Voltage and Current Harmonics (1 – 25) and THD% up to 75Hz (1 – 8 above 75Hz)
- LoZ - Low impedance mode prevents false readings due to "Ghost" voltage
- NCV – Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Peak Mode, Min/Max and Data Hold function
- Auto Power Off

Function	Range	Accuracy
AC TRMS Current	600.0A - 1000A	±(2.5% +8)
DC Current	600.0A - 1000A	±(2.8% +5)
AC TRMS Voltage	6.000V – 1000V	±(1.5% +5)
DC Voltage	600.0mV – 1500V	±(1.5% +8)
LoZ AC TRMS Voltage	6.000V – 1000V	±(3.0% +40)
AC+DC TRMS Voltage	6.000V – 1000V	±(2.5% +20)
AC Voltage Harmonic	1 - 25 (20 - 75Hz) [0.1% THD]	±(5.0% +8)
	1 - 8 (75 - 400Hz) [0.1% THD]	±(6.0% +8)
AC Current Harmonic	1 - 25 (20 - 75Hz) [0.1% THD]	±(5.0% +20)
DC Power	99.99kW – 999.9kW	±(3.0% +5)
AC Power	99.99kW/kVA/kVAR	±(3.0% +5)
	999.9kW/kVA/kVAR	
Power Factor	0.20 – 1.00	±3°
Energy	9.999kW/kVA/kVAR	
	99.99kW/kVA/kVAR	±(3.0% +5)
Resistance	600.0Ω – 60.00MΩ	±(1.5% +5)
Frequency	9.999Hz – 9.99kHz	±(1.2% +6)
Capacitance	60.0nF – 6000µF	±(3.0% +8)
Temperature	-40°C – 1000°C	±(1.5% +3°C)
Duty Cycle	10.0% - 90%	±(1.2% +8)
Size	236 x 66 x 44mm	
Weight	350g	



MT785



## 130A AC/ 180A DC CLAMP SENSOR

The K8115 permits extension of the AC and DC current ranges of almost any Digital Multimeter without breaking the circuit under test.

### Features

- Jaw Ø12mm
- 130A AC RMS
- 180A DC
- Permits extension of AC /
- DC current ranges of almost any Digital Multimeter without breaking the circuit under test
- 4mm Banana Plugs

Function	Range	Accuracy
Jaw size	12mm	
DC Current	0A - 180A	±(1.2% + 4mV)
AC Current	0.1A - 130A	±(1.2% + 4mV)
Size	147 x 42 x 22mm	
Weight	140g	



K8115

## 100A AC LEAKAGE CLAMP METER

The K2434 is a low cost Leakage Clamp Meter and has a measuring range from 0.1mA to 100A. Other features include a frequency filter switch to eliminate the effect of harmonics and data hold. This is the ideal meter to be used when checking Insulation Resistance on live circuits.

### Features

- $\varnothing 28\text{mm}$  Cable
- Measures AC current up to 100 Amps
- Frequency Response from 40Hz to 400Hz
- Provides filtering function to remove high frequency generated by such equipment as inverters
- Data Hold Function
- Sleep mode prevents unnecessary power consumption
- Meter can perform the function of an Insulation Tester without breaking the circuit

Function	Range	Accuracy
Jaw size	28mm	
AC Current	400mA - 100A	$\pm(2.0\% + 4)$
Size	169 x 75 x 40mm	
Weight	220g	



K2434

**TRUE RMS**

## 1000A AC LEAKAGE CLAMP METER

The K2413R is a True RMS sensing leakage clamp meter, with the wide 68mm transformer jaws. The K2413R is best suited for clamping on all three or four wires together on three phase systems for leakage current measurements. The Peak Hold facility has a selectable response time of 10ms or 100ms and features a frequency filter switch which permits AC leakage current of 50/60Hz fundamental frequency only or including harmonics.

### Features

- True RMS
- $\varnothing 68\text{mm}$  Cable
- Measures AC current up to 1000 Amps
- 0.1mA Resolution
- Extra wide transformer jaws for clamping on all wires
- AC output terminal for waveform viewing on oscilloscopes
- Output terminal for recording current input
- Dual frequency response of fundamental 50/60Hz only or from 20Hz to 1kHz
- Shielded transformer jaws minimize the effect of external or stray magnetic fields
- Auto Power Off

Function	Range	Accuracy
Jaw size	68mm	
AC Current	200mA - 1000A	$\pm(2.8\% + 10)$
Size	250 x 130 x 50mm	
Weight	600g	



K2413R

### Method of leakage current measurement

Broadly speaking, there are two methods of leakage current measurement. One is designed to measure leakage current by directly clamping on an earthing conductor and the other is intended to measure leakage current by clamping on two-way wires together. Please refer to the figure below for respective measurement methods. The principle of measurement involving the clamping of two-way wires together is meant to find out the difference of current flowing between the incoming wire and out-going wire and display the result. If there is no leakage on the load side, the instrument display reads zero. If the leakage occurs on the load side, the leakage current will flow back into the power supply through the earth, resulting in the difference of current flowing between the two-way wires which will then be displayed on the instrument as a value of leakage current.

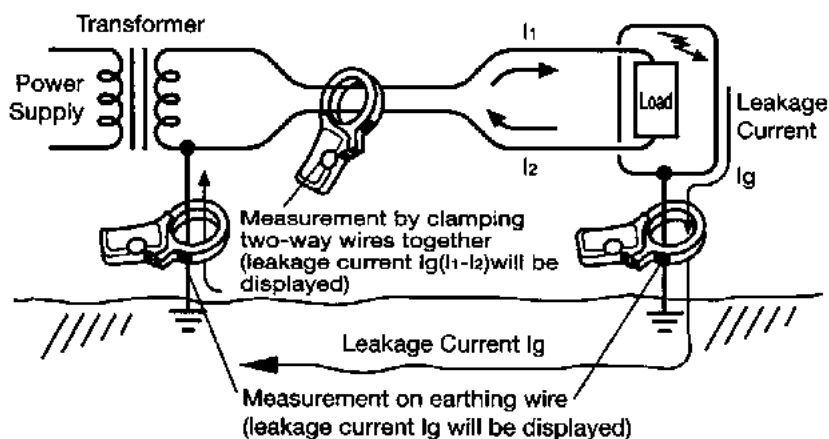


fig. Method of leakage current measurement





## INSULATION TESTERS

### CONTENTS

1000V Insulation Testers	34
Insulation Tester & TRMS Multimeter	35
High Voltage Insulation Testers	38
High Voltage Detectors	42





MT560

## 1000V INSULATION TESTER



The MT560 has a large dual display with a bargraph indicating the insulation resistance. This compact handheld meter has four test ranges: 125V, 250V, 500V and 1000V source for the test and under each range it can supply more than 1mA current to feed the capacitance load. The tester features AC and DC voltage ranges as well as a battery indication. Should AC voltage be present, the LCD display will indicate to the operator the AC voltage value, regardless of what range the meter is on except in the Off position. Other features include a data hold function, a bright white LED back light and a continuity buzzer.

### Features

- Four test ranges 125V-250V-500V-1000V
- MIN/MAX Record mode
- Measures AC Voltage to 750V and DV Voltage to 1000V
- Large Dual LCD display with bargraph
- Live Circuit detection prevents insulation tests if voltage >30V
- Auto Null of test lead resistance
- 1mA output current on insulation test
- 200mA short circuit on continuity range
- Continuity Buzzer
- Automatic discharge of capacitive voltage after test for added protection
- Data Hold function
- Lock down Test Button for continuous use
- Hands free strap and magnet supplied as standard accessories
- Rubber overmould housing
- Illuminated display

Function	Range	Accuracy
Insulation resistance	125V - 4MΩ	±(2.0% +10)
	250V - 40MΩ	±(2.0% +10)
	500V - 400MΩ	±(2.0% +10)
	1000V - 4000MΩ	±(3.0% +10)
Short circuit current	1.0mA	
Measuring Current	200mA@4.5V	
DC voltage	0 - 1000V	±(0.8% +3)
AC voltage	0 - 750V	±(1.2% +10)
Resistance	40Ω - 400Ω	±(1.2%+3)
Size	200 x 92 x 50mm	
Weight	700g	



MT550

## 1000V INSULATION TESTER



The MT550 is an easy-to-use handheld meter and has three test voltage ranges 250V, 500V and 1000V together with two continuity ranges. Whilst doing the insulation test, the large LCD will indicate the insulation resistance together with the actual output voltage. Once the test is complete the circuit under test will be automatically discharged. The MT550 features an AC and DC voltage ranges, battery voltage indication, resistance and a continuity buzzer. If AC voltage is detected, the LCD will display the actual voltage to the user except in the off position.

### Features

- Three test ranges 250V-500V-1000V
- 750V AC voltage and 1000V DC voltage ranges
- Live Circuit warning and buzzer
- Data Hold function
- 1mA output current on insulation test
- 200mA short circuit on continuity range
- Continuity Buzzer
- Automatic discharge after test
- Lock down Test Button for continuous use
- Hands free strap and magnet supplied as standard accessories
- Rubber overmould housing
- Illuminated display

Function	Range	Accuracy
Insulation resistance	250V - 200MΩ	±(3.0% +5)
	500V - 200MΩ	±(3.0% +5)
	1000V - 2000MΩ	±(5.0% +5)
Short circuit current	1.0mA	
Measuring Current	200mA@4.5V	
DC voltage	0 - 1000V	±(0.8% +3)
AC voltage	0 - 750V	±(1.2% +10)
Resistance	200Ω - 200KΩ	±(1.0%+2)
Size	200 x 92 x 50mm	
Weight	700g	



MT500

## 1000V INSULATION TESTER



The MT500 is a rugged, compact and easy to use Insulation and Continuity Tester. The instrument offers three insulation test ranges: 250V, 500V and 1000V, a 3Ω continuity range and a 500Ω resistance range. This meter is not only equipped with a "Live Circuit Warning" but also displays the actual AC voltage measurements of the mains supply. The scale has a backlight which is ideal when working in dimly lit environments.

### Features

- Three test ranges 250V-500V-1000V
- 600V AC voltage range
- Live Circuit warning and buzzer
- Data Hold function
- 1mA output current on insulation test
- 200mA short circuit on continuity range
- Automatic discharge after test
- Front panel zero adjustment for test lead resistance
- Lock down Test Button for continuous use
- Hands free strap and magnet supplied as standard accessories
- Rubber overmould housing
- Illuminated display

Function	Range	Accuracy
Insulation resistance	250V - 100MΩ	±(5.0%)
	500V - 200MΩ	±(5.0%)
	1000V - 400MΩ	±(5.0%)
Short circuit current	1.3mA	
Measuring Current	200mA@4.5V	
AC voltage	0 - 600V	±(3.0%)
Resistance	3Ω - 500Ω	±(3.0%)
Size	200 x 92 x 50mm	
Weight	700g	



INSULATION TESTER & TRMS MULTIMETER

The MT565 is a combination of a True RMS multimeter and an Insulation Continuity tester. The MT565 measures AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle and temperature. The Low pass filter can accurately measure variable frequency drive (VFD) signals. The insulation tester offers 50V, 100V, 250V, 500V, and 1000V ranges with an insulation resistance up to 5000MΩ, DAR and Auto PI functions with adjustable time setting and an auto discharge. The Low Ohm function offers a resolution of 1mA and an open circuit voltage of 5V. The meter has a 50 000 count LCD dual display with an analogue bar graph, and the CAT IV 600V rating ensures the highest level of safety. The unit offers Bluetooth communication and an internal memory to store and transfer information. The Bluetooth app is available on both Android and iOS platforms. This provides maximum versatility and a wide range of features for both trouble shooting and preventative maintenance electricians.



Features

- 5 Insulation Test Ranges: 50V, 100V, 250V, 500V, 1000V
- Insulation Resistance up to 5GΩ
- 50 000 count with analogue bargraph backlit LCD display
- Measures AC and DC voltage up to 1000V
- Measures AC and DC current up to 10A
- Temperature measurement from -50°C to 1200°C
- Capacitance to 5mF
- Frequency to 50MHz
- Dielectric Absorption Ratio (DAR)
- Polarization Index (PI)
- Low Pass Filter for measurement of variable frequency drive (VFD)
- Auto discharge of voltage test signal
- Peak Hold function for Voltage and Current measurements
- Download stored data to iOS or Android App via Bluetooth
- Continuity buzzer
- Min/Max and Data Hold function
- Auto Power Off
- IP65 double moulded rugged waterproof housing

Function	Range	Accuracy
<b>Insulation</b>		
50V – 2000MΩ	1mA@50kΩ	±(4.0% +5)
100V – 5000MΩ	1mA@100kΩ	±(4.0% +5)
250V – 5000MΩ	1mA@250kΩ	±(3.0% +5)
500V – 5000MΩ	1mA@500kΩ	±(3.0% +5)
1000V – 5000MΩ	1mA@1MΩ	±(4.0% +5)
<b>Low Ohm Meter</b>		
Resistance	0.000Ω – 2000Ω	±(2.0% +5)
Open Circuit Voltage	5.0V	±1V
Measuring Current	200mA	
<b>Multimeter</b>		
DC Voltage	500mV – 1000V	±(0.1% +4)
AC Voltage	500mV – 1000V	±(0.1% +5)
DC Current	500μA – 10A	±(1.0% +3)
AC Current	500μA – 10A	±(1.5% +3)
Resistance	500Ω – 50MΩ	±(0.5% +3)
Frequency	50Hz – 50MHz	±(0.3% +2)
Capacitance	500nF – 5mF	±(3.5% +9)
Temperature	-50°C – 1200°C	±(1.0% +2.5°C)
Size	210 x 97 x 68mm	
Weight	634g	



MT565



K3005



## 1000V INSULATION TESTER

The K3005 has three test voltage ranges: 250V, 500V and 1000V and is equipped with a unique bargraph display that illustrates to the user that the insulation under test meets the minimum voltage required by the regulations. An advanced feature included in this model is Auto Null mode, this unique function subtracts the test lead resistance during continuity tests, ensuring repeatable accuracy. Another great feature is the EL Backlight on the display which enables readings to be taken in dimly lit areas.

### Features

- Three test ranges 250V - 500V - 1000V
- Resistance to 2000Ω
- Auto null function
- Automatic discharge after test
- Main bargraph indication of insulation resistance, sub bargraph indicates output voltage
- Displays the value of external AC voltage along with flashing symbol and buzzer
- Lock down Test Button for continuous use
- 1mA output current on insulation test
- 200mA short circuit on continuity range
- EL Backlight for dimly lit areas

Function	Range	Accuracy
Insulation resistance	250V - 20MΩ	±(1.5% +5)
	500V - 200MΩ	±(1.5% +5)
	1000V - 2000MΩ	±(10% +3)
Short circuit current	1.5mA	
Measuring Current	200mA	
AC voltage	0V - 600V	±(5.0% +3)
Resistance	20Ω - 2000Ω	±(1.5% +5)
Size	185 x 167 x 89mm	
Weight	900g	



K3131  
K3131IS



## 1000V INSULATION TESTER

The K3131 is Major Tech's premier analogue Insulation and Continuity tester, designed to meet international standards of performance and safety. This model is a high powered, high quality instrument used by professionals to obtain accurate values of insulation and continuity resistance in accordance with SABS Q142 requirements. The K3131 offers three insulation test ranges: 250V, 500V and 1000V and two continuity ranges, and is equipped with a clear, easy to read illuminated scale. This instrument is available in an intrinsically safe version on request.

### Features

- Three test ranges 250V - 500V - 1000V
- Resistance to 20Ω
- Auto discharge after test
- Housed in IP54 Casing
- Live circuit warning
- Lock down Test Button for continuous use
- 1mA output current on insulation test
- 200mA short circuit on continuity range
- Backlight facility for dimly lit areas
- K3131IS Intrinsically safe version available

Function	Range	Accuracy
Insulation resistance	250V - 100MΩ	±(0.1MΩ-10MΩ)
	500V - 200MΩ	±(0.2MΩ-20MΩ)
	1000V - 400MΩ	±(0.4MΩ-40MΩ)
Short circuit current	1.3mA	
Measuring Current	200mA	
Resistance	0 - 20Ω	±(3%)
Size	167 x 1185 x 89mm	
Weight	860g	



K3132



## 1000V INSULATION TESTER

The K3132 is a highly compact and easy to use Insulation and Continuity Tester. Designed to have an IP protection rating of IP54 and is ideally suited to more arduous environments. The instrument offers three insulation test ranges: 250V, 500V and 1000V, 3Ω and 500Ω Continuity range. This meter is not only equipped with a "Live Circuit Warning" but also displays the actual AC voltage measurements of the mains supply.

### Features

- Three test ranges 250V - 500V - 1000V
- Resistance to 500Ω
- Auto null function
- AC voltage measurements to 600V
- Live circuit warning
- Lock down Test Button for continuous use
- 1-2mA output current on insulation test
- 200mA short measuring current on continuity range

Function	Range	Accuracy
Insulation resistance	250V - 100MΩ	±(0.1MΩ-10MΩ)
	500V - 200MΩ	±(0.2MΩ-20MΩ)
	1000V - 400MΩ	±(0.4MΩ-40MΩ)
Short circuit current	1-2mA	
Measuring Current	210mA	
AC voltage	0 - 600V	±(5%)
Resistance	0 - 500Ω	±(5%)
Size	106 x 160 x 72mm	
Weight	560g	



# INSULATION TESTERS



## DIGITAL INSULATION/CONTINUITY TESTERS

The K3552 and the K3552BT insulation resistance testers have six ranges for insulation resistance measurement 50/100/125/250/500/1000V and insulation measurement from 4.000-40GΩ. The K3552 and K3552BT have a diagnostic test for PI polarization index and DAR dielectric absorption ratio. These insulation testers have the world's fastest measurement speed of 0.5sec and are fully protected against accidental connection to a live circuit. The internal memory can store 1000 measurements and can be transferred to the PC by using an optional K8212-USB, the K3552BT has Bluetooth 4.0 and can transfer data directly to a compatible tablet or smart phone devices. The insulation status indicator enables the user to set different low or high resistance values for each insulation respectively and the screen will change colour for high resistance (pass) the screen will be green and low resistance (fail) the screen will be red. Both Insulation tester facilitate working in dimly illuminated locations, with an automatic sensor which turns on the LCD backlight and LED spotlight on/off.

### Features

- Insulation 6 ranges 50/100/125/250/500/1000V, automatic discharge of capacitance, Polarization Index (PI) and Dielectric Absorption ratio (DAR)
- Output short circuit current 1.5mA
- Continuity range 40.00/400.0/4000Ω
- Measuring current 200mA with an output voltage of 5V
- Measurement of AC and DC voltage 2.0 to 600V
- Connectivity: K3552BT via Bluetooth to KEW Smart App and K3552 via an optional USB to PC



Function	Range	Accuracy
Insulation testing range	50/100/125/250/500/1000V	
Measuring range	4.000 – 40GΩ	±(2% + 2)
Continuity	40/400.0/4000Ω auto ranging	
Open circuit voltage	5V	±(2.5% + 8)
Measurement current	200mA	
Voltage	AC 2.0 – 600V (45-65Hz) DC -2.0 – 600V +2.0 –+600V	±(1% + 4)
Cat Rating	IEC61010 CATIII 600V/CATIV 300V	
Applicable Standards	IEC61557-1,2,6 IEC61326-1	
Communications Interface	K8212-USB (optional) Bluetooth 4.0LE Kew Smart*(K3552BT)	
Dimensions	97 x 156 x 46mm	
Weight	490g	
Power source	LR6 x 4	



K3552BT  
K3552

### Insulation status indicator enables faster Pass / Fail judgement

High (Pass)



Low (Fail)



Automatic sensor turns the LCD backlight and LED spot light ON/OFF.



File transfer via bluetooth to free iOS or Android App

## 1000V INSULATION TESTER

The K3007 is equipped with Trac Lok Circuits that improve battery life considerably, thus saving the user money. The K3007 has three test voltage ranges: 250V, 500V and 1000V and is equipped with a unique bargraph display that illustrates to the user that the insulation under test meets the minimum voltage required by the regulations. An advanced feature included in this model is Auto Null mode, this unique function subtracts the test lead resistance during continuity tests, ensuring repeatable accuracy. Another great feature is the EL Backlight on the display which enables readings to be taken in dimly lit areas. This meter offers an intrinsically safe model on request.

### Features

- Three test ranges 250V-500V-1000V
- Auto null function
- Trac-Lok mode to extend battery life by up to 400%
- Automatic discharge after test
- Main bargraph indication of insulation resistance, sub bargraph indicates output voltage
- Displays the value of external AC voltage along with flashing symbol and buzzer
- Lock down Test Button for continuous use
- 1mA output current on insulation test
- 200mA short circuit on continuity range
- EL Backlight for dimly lit areas
- K3007IS Intrinsically safe version available

Function	Range	Accuracy
Insulation resistance	250V - 20MΩ 500V - 200MΩ 1000V - 2000MΩ	±(1.5% +5) ±(1.5% +5) ±(10% +3)
Short circuit current	1.5mA	
Measuring Current	200mA	
AC voltage	0V - 600V	±(5.0% +3)
Resistance	20Ω - 2000Ω	±(1.5%+5)
Size	185 x 167 x 89mm	
Weight	900g	



K3007  
K3007IS



## 5KV INSULATION TESTER 10TΩ

The K3127 is microprocessor controlled and is capable of performing tests from 250V up to 5000V, and will automatically discharge the circuit after the test has been completed. The meter is a battery powered instrument and operates on a simple and clear basis. Other features include Insulation Resistance 10TΩ, Short-Circuit Current 5mA, IR, PI, DAR, DD, SV, RAMP. The K3127 has the capabilities of being a diagnostic tool and is intended for testing insulation on Rotating Machines, Transformers, Cables, High Voltage Generators, Electrical Circuits and Surge Arresters. These readings are displayed on the large LCD display with a bargraph together with the actual output voltage thus making it easy for the user to read the results. Once the meter test is completed it will automatically discharge the apparatus under test and indicate the discharge voltage on the display while the meter is still on.

### Features

- Insulation Resistance up to 10TΩ
- Short-Circuit Current up to 5mA
- Wide Test Voltage from 250V to 5000V
- Diagnostic Insulation Tests: IR, PI, DAR, DD, SV, RAMP.
- Wireless communication by Bluetooth for transferring and showing real-time data to PC and Android device.
- Memory and Logging functions.
- Filter function reduces noise interference.
- Robust design for field use with IP65 (lid closed).
- Powered by rechargeable battery.

Function	Range	Accuracy
Insulation resistance	250V - 10GΩ	±(5.0% +3)
	500V - 100GΩ	±(5.0% +3)
	1000V - 200GΩ	±(5.0% +3)
	2500V - 1000GΩ	±(5.0% +3)
	5000V - 10TΩ	±(5.0% +3)
Short circuit current	5mA	±(10%)
Capacitance measurement	5.0nF - 50.0μF	±(5.0% +5)
DC voltage	30V - 600V	±(2.0% +3)
AC voltage	30V - 600V	±(2.0% +3)
Size	208 x 225 x 130mm	
Case Size	380 x 430 x 154mm	
Weight	8kg	



K3127

### Data Communication Function - android only

- Transferring and showing real-time data to PC and Android tablet
- Recorded data can be transferred (PC only)
- Analyzing of the saved data (PC only)



## 5KV INSULATION TESTER

The K3125 is microprocessor controlled and is capable of performing tests from 250V up to 5000V, and will automatically discharge the circuit after the test has been completed. The meter is a battery powered instrument and operates on a simple and clear basis. The K3125 has the capabilities of being a diagnostic tool and is intended for testing insulation on Rotating Machines, Transformers, Cables, High Voltage Generators, Electrical Circuits and Surge Arresters. These readings are displayed on the large LCD display with a bargraph together with the actual output voltage thus making it easy for the user to read the results. Once the meter test is completed it will automatically discharge the apparatus under test and indicate the discharge voltage on the display while the meter is still on.

### Features

- Wide Test Voltage from 250V to 5000V
- Large LCD Display with bargraph and backlight
- Polarization index measurement (PI)
- Indication of output voltage and discharge voltage
- Insulation resistance up to 1000GΩ
- Withstand Voltage test up to 5320V
- Auto discharge function and voltage output warning
- Measuring time up to 10 Hours
- Live circuit warning symbols plus audible warning
- 2 Built-In Timers
- Auto power off and battery check

Function	Range	Accuracy
Insulation resistance	250V - 100.0MΩ	±(5.0% +3)
	500V - 100MΩ	±(5.0% +3)
	1000V - 2GΩ	±(5.0% +3)
	2500V - 100GΩ	±(5.0% +3)
	5000V - 1TΩ	±(5.0% +3)
Short circuit current	1.5mA	±(10%)
Capacitance measurement	5.0nF - 50.0μF	±(5.0% +5)
DC voltage	30V - 600V	±(2.0% +3)
AC voltage	30V - 600V	±(2.0% +3)
Size	177 x 226 x 100mm	
Weight	1,9kg	



K3125



12KV DIAGNOSTIC INSULATION TESTER 35TΩ



K3128

The K3128 is a Digital High Voltage Insulation Tester with 6 ranges, 500, 1000, 2500, 5000, 10000 and 12000V with a fine adjustment setting (5V to 100V steps) with an insulation resistance up to 35TΩ. The microprocessor controlled K3128 is ideal for analyzing the insulation characteristics of cables, transformers, motors, generators, high pressure switches, insulators and large wiring installations. It is housed in robust IP64 (lid closed) case, ideal for extended field usage, powered by rechargeable batteries and an AC input which can be operated while under charge. After a completion of an insulation test, the K3128 automatic discharge and display the test voltage. Data storage of test is available in 3 types of data: logging Data (REC File), Measured Data (Save File), and Print Screen (BMP File), this captures and saves the screen images.

Features

- Insulation Resistance (IR) & Leak Current with a wide range of measurement from 500V-1000V-2500V-5000V-10000V-12000V
- Insulation resistance up to 35TΩ
- Variable test voltage of 5V to 100V steps
- Voltage & elapsed time are displayed
- Polarization Index (PI)
- Dielectric Absorption Ratio (DAR)
- Step Voltage (SV)
- Dielectric Discharge Index (DD)
- Capacitance measurement
- Auto discharge function and voltage output warning function
- Internal Memory— max 40,000 data
- Built-in Print Screen Function enables to record display screen, records 32 screens max
- Downloading to PC – using the USB cord and the PC software included as standard accessories, the memory data or the measuring data can be transmitted to a PC at real time
- Mains and battery powered – internal battery can be charged during normal operation
- Robust design for field use with weatherproof protection in IP64 casing with lid closed
- Large backlit LCD graphic display with bargraph

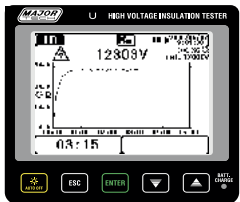


Function	Range	Accuracy
Insulation resistance	500V - 500GΩ	±(5.0% +3)
	1000V - 1TΩ	±(5.0% +3)
	2500V - 2.5TΩ	±(5.0% +3)
	5000V - 5TΩ	±(5.0% +3)
	10000V - 35TΩ	±(5.0% +3)
	12000V - 35TΩ	±(20.0%)
Short circuit current	Max 5mA	±(5.0% +5)
Capacitance measurement	5.0nF - 50.0μF	±(5.0% +5)
DC voltage	30V - 600V	±(2.0% +3)
AC voltage	30V - 600V	±(2.0% +3)
Frequency	45.0Hz - 65.0Hz	±(0.2%)
Size	330 x 410 x 180mm	
Weight	9kg	

DIAGNOSTIC INSULATION TESTS

Large Display

Graphic representation of the insulation resistance and leakage current versus time on large display with bar graph and backlight.





K3123

## 10KV INSULATION TESTER

The K3123 is a High Voltage Insulation tester that is a tough, rugged meter designed and manufactured to read accurate measurements in harsh environments. This model is gasket sealed to prevent ingress of liquids and dust and is supplied with a water resistant, heavy duty case. This Major Tech HV insulation tester is ideal for heavy duty maintenance and servicing of industrial installations, cables, transformers, generators and switchgear. It is supplied with the appropriate leads for connecting to the earthed and conducting points of the circuit under test. The rated output voltage is maintained down to 0,1% of the tester's full scale resistance, permitting accurate measurements of even low insulation resistance.

### Features

- Insulation Resistance 5000V and 10000V
- Large analogue display
- Colour scale with LED Indication
- Automatic discharge after test
- Low power consumption
- Battery test function
- Guard terminal supplied
- Supplied in a drip proof rubber sealed casing
- Lock down test button for continuous use

Function	Range	Accuracy
Insulation resistance	5000V - 200GΩ	±(5.0%)
	10000V - 400GΩ	±(5.0%)
Short Circuit Current	0,08mA	
Size	200 x 140 x 80mm	
Weight	1Kg	



K3122

## 5KV INSULATION TESTER

The K3122 is a High Voltage Insulation tester that is a tough, rugged meter designed and manufactured to read accurate measurements in harsh environments. This model is gasket sealed to prevent ingress of liquids and dust and is supplied with a water resistant, heavy duty case. This Major Tech HV insulation tester is ideal for heavy duty maintenance and servicing of industrial installations, cables, transformers, generators and switchgear. It is supplied with the appropriate leads for connecting to the earthed and conducting points of the circuit under test. The rated output voltage is maintained down to 0,1% of the tester's full scale resistance, permitting accurate measurements of even low insulation resistance.

### Features

- Insulation Resistance 5000V
- Large analogue display
- Colour scale with LED Indication
- Automatic discharge after test
- Low power consumption
- Battery test function
- Guard terminal supplied
- Supplied in a drip proof rubber sealed casing
- Lock down test button for continuous use

Function	Range	Accuracy
Insulation resistance	5000V - 5GΩ	±(5.0%)
Short Circuit Current	0.08mA	
Size	177 x 226 x 100mm	
Weight	1,7Kg	



K3121

## 2.5KV INSULATION TESTER

The K3121 is a High Voltage Insulation tester that is a tough, rugged meter designed and manufactured to read accurate measurements in harsh environments. This model is gasket sealed to prevent ingress of liquids and dust and is supplied with a water resistant, heavy duty case. This Major Tech HV insulation tester is ideal for heavy duty maintenance and servicing of industrial installations, cables, transformers, generators and switchgear. It is supplied with the appropriate leads for connecting to the earthed and conducting points of the circuit under test. The rated output voltage is maintained down to 0,1% of the tester's full scale resistance, permitting accurate measurements of even low insulation resistance.

### Features

- Insulation Resistance 2500V
- Large analogue display
- Colour scale with LED Indication
- Automatic discharge after test
- Low power consumption
- Battery test function
- Guard terminal supplied
- Supplied in a drip proof rubber sealed casing
- Lock down test button for continuous use

Function	Range	Accuracy
Insulation resistance	2500V - 2GΩ	±(5.0%)
Short Circuit Current	0.08mA	
Size	177 x 226 x 100mm	
Weight	1,6Kg	





# HV INSULATION TESTERS



## 5kV INSULATION TESTER



The MT570 is a CAT IV 600V Digital High Voltage Tester with measurements from 500V DC to 5000V DC, and will automatically discharge the circuit after the test has been completed. Using the rotary selector switch, 4 preset ranges of 500V, 1000V, 2500V and 5000V can be selected, with an insulation resistance up to 1TΩ. The microprocessor controlled MT570 has the capabilities of being a diagnostic tool and is intended for testing insulation on Rotating Machines, Transformers, Cables, High Voltage Generators, Electric Circuits and Surge Arrestors as the short circuit current output is up to 5mA. 200 test measurement results can be saved in the memory of the meter and recalled onto the LCD display. The large intelligent LCD display consists of 2 lines x 16 characters, indicating the reading of insulation, measuring time, output voltage and output current. The MT570 can measure AC and DC voltage up to 600V and is housed in a robust case ideal for extended field use, powered by 8 pieces "C" 1.5V batteries.

### Features

- Insulation Test Voltages from 500V to 5000V
- Microprocessor controlled with 2 lines x 16 characters intelligent display
- Short circuit current up to 5mA
- DAR - Dielectric Absorption Ratio indication
- PI - Polarization Index indication
- Measurement of AC and DC voltage up to 600V
- Auto ranging on all insulation ranges
- Adjustable test time from 1 minute to 30 minutes
- Auto hold to freeze measurement readings
- 200 measurement results can be saved in memory and recalled onto the display
- Visual and audible warning of external voltage greater than 30V AC and DC
- Auto Power Off
- Date and Time calendar

Function	Range	Accuracy
Insulation	500V – 100GΩ 1000V – 200GΩ 2500V – 500GΩ 5000V – 1TΩ	±(5.0% +5) ±(5.0% +5) ±(5.0% +5) ±(5.0% +5)
Short Circuit Current	5mA	
Current Measurement	0.5nA to 0.55mA (Depending on insulation resistance)	
AC Voltage	30.0V – 600V	±(2.0% +3)
DC Voltage	30.0V – 600V	±(2.0% +3)
Power Source	8 x 1.5V "C" Alkaline Batteries	
Size	250 x 190 x 127mm	
Weight	2.07kg	



MT570

## 10kV INSULATION TESTER



The MT575 is a CAT IV 600V Digital High Voltage Tester with measurements from 1000V DC to 10,000V DC, and will automatically discharge the circuit after the test has been completed. Using the rotary selector switch, 4 preset ranges of 1000V, 2500V, 5000V and 10 000V can be selected, with an insulation resistance up to 2TΩ. The microprocessor controlled MT575 is ideal for analysing the insulation characteristics of cables, transformers, motors, generators, high pressure switches, insulators and large wiring installations as the short circuit current output is up to 5mA. 200 test measurement results can be saved in the memory of the meter and recalled onto the LCD display. The large intelligent LCD display consists of 2 lines x 16 characters, indicating the reading of insulation, measuring time, output voltage and output current. The MT575 can measure AC and DC voltage up to 600V and is housed in a robust case ideal for extended field use, powered by 8 pieces "C" 1.5V batteries.

### Features

- Insulation Test Voltages from 1000V to 10 000V
- Microprocessor controlled with 2 lines x 16 characters intelligent display
- Short circuit current up to 5mA
- DAR - Dielectric Absorption Ratio indication
- PI - Polarization Index indication
- Measurement of AC and DC voltage up to 600V
- Auto ranging on all insulation ranges
- Adjustable test time from 1 minute to 30 minutes
- Auto hold to freeze measurement readings
- 200 measurement results can be saved in memory and recalled onto the display
- Visual and audible warning of external voltage greater than 30V AC and DC
- Auto Power Off
- Date and Time calendar

Function	Range	Accuracy
Insulation	1000V – 200GΩ 2500V – 500GΩ 5000V – 1TΩ 10 000V – 2TΩ	±(5.0% +5) ±(5.0% +5) ±(5.0% +5) ±(5.0% +5)
Short Circuit Current	5mA	
Current Measurement	0.5nA to 0.55mA (Depending on insulation resistance)	
AC Voltage	30.0V – 600V	±(2.0% +3)
DC Voltage	30.0V – 600V	±(2.0% +3)
Power Source	8 x 1.5V "C" Alkaline Batteries	
Size	250 x 190 x 127mm	
Weight	2.12kg	



MT575



MT273

## HV NCV DETECTOR

The MT273 Non-Contact Voltage Detector tests for energized circuits and defective grounds, for an electrician on the factory floor or power utility company. The MT273 Non-Contact Voltage Detector's voltage sensor will flash blue and sound intermittently when in contact with high voltage or within close proximity of an outlet, terminal strip, or power cord.

### Features

- Check and detect live high voltage cables
- Non-contact detection of live voltage
- Two ranges of selection: High / Low
- Power consumption: 20mA
- High & Low voltage detection mode
- Light weight, robust and compact
- Duty Cycle continuous

Function	Range
AC Voltage	50V -1.5kV/1.5kV-132kV
Duty Cycle	Continuous
Non Contact Voltage (NCV)	Yes
Response time	Instantaneous
Voltage Detector Visual	Bright Blue LED
Voltage Detector Audible	Continuous Beep
Power On Indicator	Flashing Blue LED
Size	245 x 80 x 37 mm
Weight	175g



MT269

## SAFETY VOLTAGE DETECTOR

The MT269 is a personal instrument designed to detect voltage from 100V AC to 69kV AC and alert users with bright LED indication and a loud audible buzzer sound, while approaching live equipment where dangerous voltage is present. The MT269 being a safety voltage detector is supplied in a pouch to typically be hung around the user's neck and ensures the user stays a safe distance away from live equipment, and protects and safeguards users from approaching dangerous live high voltage equipment or cables.

### Features

- Bright LED visual indication
- Audible indication
- AC voltage detection: 100V AC to 69kV AC
- Non-contact detection by proximity
- Convenient to use neck hanging strap and case
- On/Off switch Self-test function
- Comply with EN 61326-1
- Lightweight, robust and compact

Function	Range
AC Voltage Detection	100V to 69kV
Frequency Range	40 to 70Hz
Sound Level	> 99dB
Operating Temperature	0°C to +40°C
Operating Humidity	20% to 80% RH
Size	100 x 71 x 40mm
Weight	153g



MT222

## SAFETY VOLTAGE DETECTOR

The MT222 is a personal sensor for detecting AC Voltage from 100V AC to 22kV AC and alert users with bright LED indication and a loud audible buzzer sound, while approaching live equipment where dangerous voltage is present. The MT222 provides electric engineering personnel, power engineering personnel, firefighting personnel and instrument equipment workers with prominent warning when approaching high voltage source. Supplied with a rubber strap and hooks, the unit can be worn on the wrist, around the arm or placed on a safety helmet. The unit uses a CR2032 battery and typical battery life is around 50 hours.

### Features

- Compact, easy to wear and convenient in use
- LED visual indication and Audible indication
- AC voltage detection from 100V to 22kV
- Non-contact detection by proximity
- IP65 waterproof housing
- Use on wrist, arm or on a safety helmet
- Self-test function
- Comply with EN 61326-1
- Low power consumption

Function	Range
AC Voltage Detection	100V to 22kV
Voltage Detection Distance	6.6kV (3.8kV to ground): 40cm ±20% 11.4kV (6.6kV to ground): 55cm ±20% 19.7kV (11.4kV to ground): 80cm ±20% 22.8kV (13.2kV to ground): 40cm ±20%
Detection Angle	90°
Frequency Range	50/60Hz
Sound Level	70dB or higher at 1m
Operating Temperature	0°C to +40°C
Operating Humidity	20% to 80% RH
Size	61 x 61 x 18.5mm
Weight	70g



MT275

## SAFETY VOLTAGE DETECTOR

The MT275 is a high voltage proximity detector that has 10 voltage settings from 240V AC to 500kV AC. The MT275 provides a wide 120° angle for non-contact detection with an internal pickup sensor plate that senses the radiated field which surrounds live conductors, the field strength increases with voltage and decreases quickly with distance or earthing shields. When testing for high kilo voltages the MT275 can be used in conjunction with long insulating link sticks or hot sticks. There is a built-in self-test range to verify the detector is in working order.

### Features

- 10 voltage settings from 240V to 500kV
- Bright LED visual indication and Audible indication
- AC voltage detection from 240V to 500kV
- Wide 120° angle for voltage detection
- Non-contact detection by proximity
- IP65 waterproof housing
- Easy-to-prove method

- Compatible with most hot sticks
- Suitable for indoor and outdoor use
- High impact nylon casing
- Built-in Flashlight
- Self-test function
- Comply with EN 61326-1, CISPR 11, EN 61000-4-2, EN 61000-4-3, EN 61000-4-8

Function	Range
AC Voltage Detection	240V to 500kV
AC Voltage Ranges	240V, 3.3kV, 11kV, 22kV, 33kV, 66kV, 110kV, 220kV, 330kV, 500kV
Detection Angle	120°
Frequency Range	40 to 70Hz
Sound Level	> 99dB
Operating Temperature	-20°C to +60°C
Operating Humidity	20% to 85% RH
Size	255 x Ø96 x Ø45mm
Weight	531g

Function	Range	(MDV) Minimum Detection Voltage	(MDV) Minimum Detection Voltage
AC Voltage	240V	80V	9.1%
	3.3kV	80V	9.1%
	11kV	1kV	9.1%
	22kV	2kV	9.1%
	33kV	3.1kV	9.4%
	66kV	6kV	9.4%
	110kV		
	220kV		
	330kV		
	500kV		





## COMPLIANCE TESTERS

### CONTENTS

Multifunction Testers	44
Earth Resistance & Resistivity Testers	47
Loop & PSC / PFC Testers	50





MT390

## MULTIFUNCTION TESTER

The MT390 is a fast and accurate Multifunction Installation tester which makes testing installations easy and ensures that it is safe and complies to regulations, and is a must have in an electrician's arsenal. It is the most cost effective MFT on the market and is a firm favourite with electrical installers and commissioning engineers. The unit features Insulation resistance, Low Ohm measurement, Loop/PSC measurement, RCD measurement, Earth resistance measurement, Phase rotation and shows mains voltage with frequency on screen. The MT390 has soft key and menu options allowing the user to access the easy-to-use menu to select and change parameters, and a friendly "Help" option displays a wiring diagram on screen to ensure correct connection. With safety in mind, the meter connections panel has a protective slide that prevents incorrect connection while charging and communicating with the meter. The 3.5" TFT screen displays multiple readings clearly and are visible from all angles.

The instrument allows the user to save, review and label recordings. The all-in-one design includes Bluetooth file transfer and an internal memory with easy-to-use software that eliminates time consuming paperwork while testing multiple sites. The Bluetooth app allows the user to instantly share a measurement to a smartphone, both iOS and Android devices are supported, and the test report can be shared instantly via email in CSV format. Other connection options include Mini USB, S-Video TV out and MicroSD. The rugged double injection rubber housing withstands the knocks and bangs of everyday heavy use, and is supplied in a hard plastic carrying case. The MT390 complies with the IEC 61010 CAT IV 400V safety ratings.

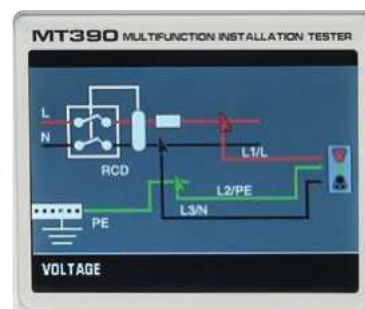
### Features

- 3.5" TFT colour LCD display 320 x 240 pixels
- Insulation, Continuity, Earth Resistance
- Variable RCD test with Pass/Fail indication
- Line Voltage with Frequency
- Loop and PSC test, Phase Rotation
- Transmit recorded data via Bluetooth / SD Card / USB
- Voltage recording with Graph
- Combined readings on the images
- Safety design with sliding shield plate to avoid electric shock
- **Standard accessories** include Earth Resistance Spikes and Leads

Function	Range
Insulation Resistance	125,250,500,1000V
Measuring Range	0,125 - 4000MΩ
Short Circuit Current	1mA
Earth Resistance	99.99 - 2000Ω
Resolution	0.01Ω
Low Ohm (Continuity)	400Ω
Resolution	0.001Ω
Open Circuit Voltage	5.8VDC
Measurement Current	200mA
Voltage Measurement	80 to 500V
Frequency	45-65Hz
Phase Rotation	50-500V
Loop Impedance Range	0.23Ω - 999Ω
Resolution	0.01Ω
Measuring Current (Hi Amp)	8A - 25A
Measuring Current (Anti-Trip)	15mA
PSC/PFC Range	0 - 50kA
Resolution	1A
RCD Test Current	10mA, 30mA, 100mA, 300mA, 500mA,
Auto x1/2, x1, x2 and x5	1000mA
Communication Interface	MiniUSB, Bluetooth, MicroSD, S-Video
Dimensions	220 x 95 x 61mm
Weight	631g



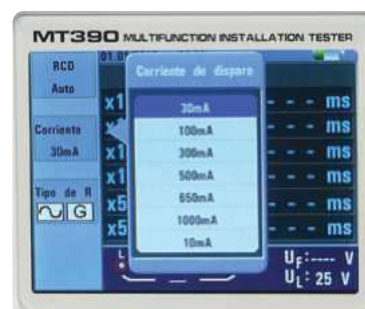
File Transfer via Bluetooth to free iOS or Android app (phone not included)



Graphical help options



Dual line display with correct wiring indication



Easy access to parameter setup via F-Key



# MULTIFUNCTION TESTER



## MULTIFUNCTION INSTALLATION TESTER

The K6516 and K6516BT are advanced multifunction testers performing 12 separate test functions which are required for SANS 0142 and IEC 61557-10. The multifunction's include Insulation with PI and DAR, continuity, earth loop impedance, RCD testing, prospective short circuit, prospective fault current, earth resistance, AC Voltage, frequency, phase rotation, SPD (varistor) and PAT (portable appliance testing). The meters can store a maximum of 1000 measured results and the K6516 downloaded via a K8212-USB adaptor (also an optional accessory for K6516BT) and the K6516BT can transfer data to a tablet or smartphone via Bluetooth using Kew smart\* in google play or iOS App store. The K6516's are software driven and guides the user through the colour graphic display, making the meter very user friendly. The K6516's come supplied with a remote test lead for hands free testing. The ATT (anti trip technology) with 2 and 3 wire for no trip Loop L-PE on all RCD's. With 2 wire only can test with no neutral (eg 3-phase motors).



K6516BT  
K6516

### Features

- Insulation 4 ranges 100/250/500/1000V, automatic discharge of capacitance, Polarization Index (PI) and Dielectric Absorption ratio (DAR)
- Loop Impedance High Test current range of 2Ω with 0.001Ω resolution
- RCD Type AC, A, F, B (general & selective) EV (electric vehicle) and variable RCD's, single and auto test, ramp test and contact voltage
- Earth Resistance test 2 & 3 wires with all accessories
- ACV Trms Voltage measurements 2V to 600V, mains frequency
- Continuity test at 200mA or 15mA with selectable buzzer for fast judgment
- Phase rotation on 3-phase lines with clear indication of the sequence on the display
- SPD (Varistor) Surge protection device test, for SPD that uses varistor
- PAT- Portable Appliance Tester function for insulation and continuity
- Connectivity: K6516BT via Bluetooth (to Kew Smart App) and K6516 via USB (to PC)

Function	Range	Accuracy
Insulation testing range	100/250/500/1000V	
Measuring range	2.000-2000MΩ	
Rated Current	1.0 – 1.2mA	±(2% + 6)
Loop Impedance	3 wire 100-260V (50/60Hz)	
	2 wire 48-260V (50/60Hz)	
	Range 20.00/200.0/2000Ω	±(3% + 6)
PSC/PFC	2000A/20kA	Derived from loop and voltage measurement
RCD rated voltage	100-260V 50/60Hz	
Function	x1/2, x1, x5, Ramp, Auto, Uc	
	10/30/100/300/500/1000mA	±(2% + 8)
Trip Time	x1/2	
Continuity	20.00/200.0/2000Ω	
Open circuit voltage	7-14VDC	
Measuring current	>200mA	±(2% + 8)
Voltage	2.0-600VAC auto ranging	±(2% + 4)
Frequency	45-65Hz	±(0.5% + 2)
Phase rotation	48 – 600V 50/60Hz	
Earth resistance	20.00/200.0/2000Ω auto ranging	±(2% + 0.08)
Cat Rating	IEC610101-1 CAT IV 300V	
Applicable standards	IEC61010-2-034	
	IEC61557-1,2,3,4,5,6,7,10	
Communication interface	K8212-USB (optional K6515BT)	
	Bluetooth 5.0 (K6515BT) Android 5.0 or more iOS 10.0 or more	
Power source	LR6 x 8	
Dimensions	136 x 235 x 114mm	
Weight	1300g	

### Large LCD

All the test data is shown in one large colored screen.



Loop test from a wall socket



Continuity check of equipotential bonding

### SPD test

SPD (Surge Protection Device) which contains varistor can be tested measuring the tripping voltage without damage it.



### Connectivity

K6516 can download the test data by connecting the USB adaptor (Model 8212-USB) and then print complete Test Reports by a PC. While K6516BT can transfer the test data to a Tablet or Smartphone via Bluetooth. Such test data can be saved, shared and sent by email. The USB adaptor can also be ordered as an option for the K6516BT.



## PV INSULATION EARTH TESTER

The K6024PV can measure insulation resistance of PV systems with open voltages of 1000V or less and of low voltage installations of 600V or less. It also measures earth resistance and features an automatic AC/DC voltage detection when measuring distribution lines. The K6024PV is compact and lightweight and has an internal memory that can store up to 1000 recordings that can be transferred to PC for analysis.

Insulation resistance	PV insulation	Insulation Range
Test voltage	500V / 1000V	250V / 500V / 1000V
Measuring range(Auto range)	20.00/200.0/2000MΩ	20.00/200.0/2000MΩ
Mid-scale value	—	50MΩ
Rated current	—	1.0-1.2mA / 0.25MΩ 0.5MΩ 1MΩ
First effective measuring range	1.51-200.0MΩ	1.51-100.0MΩ
	1.51-1000MΩ	1.51-200.0MΩ / 1.51-1000MΩ
Accuracy	±1.5%rdg±5dgt	±1.5%rdg±5dgt
Open circuit voltage	0 - +20%	
Short circuit current	Max 1.5mA	
<b>Earth resistance</b>		
Measuring range(Auto range)	20.00/200.0/2000Ω	
Accuracy	±3.0%rdg±0.1Ω (20Ωrange)	±3.0%rdg±3dgt (200/2000Ωrange)
<b>Voltage measurement</b>		
Measuring range	AC 5-600V (45-65Hz)DC	±5-±1000V
Accuracy	±1.0%rdg±4dgt	
Size	84 x 184 x 133mm	
Weight	900g	



K6024PV

### Features

- Accurate measurement of insulation resistance even with Photo Voltaic (PV) arrays generating power.
- Elapsed time measurement
- 1000 data point memory
- Volt Amperometric Earth resistance 2pole and 3pole
- Luminescent buttons and Backlight
- Remote probe test button
- IP54 Water proof design



## MULTIFUNCTION TESTER

The K6011 is a highly portable meter that provides the solution to testing electrical installations to the requirements of SANS 0142 and can perform five separate test functions which include insulation, continuity, earth loop impedance, prospective short circuit and RCD trip testing. The K6011 features Phase Angle selection, auto null of test leads for continuity, correct wiring status, testing of DC RCD's, and auto power off.



K6011

Function	Range	Accuracy
Continuity Testing Range	0.01Ω - 2000Ω	±(0.5% + 3)
Open Circuit Range	>6V	
Open Circuit Current	200mA	
Insulation Testing Range	250V, 500V, 1000V	
Measuring Range	0.01MΩ - 200MΩ	±(1.5% + 3)
Rated Current	1mA	
Loop Impedance Range	0.01Ω - 2000Ω	
Voltage Measuring Range	25V - 500V (45 - 65Hz)	±(3.0% + 4)
Nominal Test Current	25A(20Ω), 15mA(200Ω & 2000Ω)	
Test Period	1/2 CYCLE (10ms)	
PSC Testing Range	1A - 20kA	±(10% + 5)
Trip Duration	X 1/2: 10/30/100/300/500/1000mA	
	X 1: 10/30/100/300/500/1000mA	
	X 5: 10/30/100/300mA	
Trip Current Duration	DC (6mA): 10/30/100/300/500mA	
	RCD x 1/2, x 1: 2000ms	±(1.0% + 3)
	RCD x 5: 50ms	±(1.0% + 3)
Phase Rotation	230V AC	
Size	130 x 183 x 100mm	
Weight	1.080kg	

### Features

- 5 Test functions
- Microprocessor Controlled for Accuracy and Reliability
- Direct readout of PSC and Earth Fault Current
- Auto power off
- 0° and 180° phase angle selection
- Tests of a large range of RCD's
- DC tests for DC sensitive breakers
- Polarity switch for continuity tests Auto-null facility for continuity tests
- Earth probe for loop impedance testing on extraneous metalwork
- Contact voltage measurement
- Loop impedance test with 0.01Ω resolution
- Live circuit warning and visual indication of correct wiring status
- 250V, 500V and 1000V insulation ranges
- IP54 dust and water resistant casing
- **Optional accessories** K7133 Distribution Board Leads



## EARTH RESISTIVITY & RESISTANCE TESTER

The K4106 is a 2/3/4-wire Digital Earth resistance/Earth Resistivity Tester equipped with a microcomputer and can measure earth resistances and calculate earth resistivity's ( $\rho$ ), using the "Wenner" 4 pole method. This instrument is ideal for Earth measurements also in large Earthing systems because it uses a considerable test current of 80mA(max) yielding a high resolution of 1m $\Omega$  on 20 $\Omega$  range. The Earth Resistivity measurement is useful for soil surveys to establish the optimum earth electrode system design and site, to avoid extra cost of re-working electrode installations. It can also be suitable for geological investigations.

### Features

- High test current up to 80mA yielding resolution of 0.001 $\Omega$  on 20 $\Omega$  range.
- Advanced Filtering method (based on FFT Fast Fourier Transform) reduces noise interference for obtaining stable measurements.
- Earth resistance measurement with 4, 3 and 2 wires
- Earth resistivity tester ( $\rho$ ) using 4 pole Wenner method
- 800 Data storage points
- Test current frequency in four bands of 94 / 105 / 111 / 128Hz
- Earth (Ground) Resistance 200k $\Omega$
- Earth Soil Resistivity 200k $\Omega$
- "Zero adjust" the Residual Resistance (Rk)
- Soil Earth Resistivity is automatically calculated
- Distance set within a range of 1.0 to 30.0m at 0.1m steps
- Several sub-results and parameters can be shown on the display: Resistance of the Auxiliary Earth Spikes, Frequency of Test Current, Voltage and Frequency of Interference (noise), Residual Resistance Rk, etc.
- Memory, recall and download - results via USB adaptor
- Warning indication of noise & high resistance of auxiliary earth spikes
- Robust design with IP54 protection.



K4106

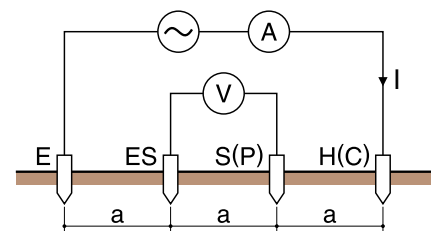


### Principle of Earth Resistivity ( $\rho$ ) Measurements

According to the Wenner 4-pole method, apply AC current "I" between the "E" (earth electrode) and "H(C)" (current electrode) to find out the potential difference "V" between the two potential electrodes "S(P)" and "ES".

To obtain the earth resistance "Rg ( $\Omega$ )", divide the potential difference "V" by AC current "I"; where the distance between electrodes is "a" (m).

Then use the formula:  $\rho = 2 \cdot \pi \cdot a \cdot Rg (\Omega \cdot m)$ .



Function	Range	Resolution	Measuring Range	Accuracy
Earth Resistance	2 $\Omega$	0.001 $\Omega$	0.03 – 2.099 $\Omega$	$\pm(2\% + 0.03\Omega)$
	20 $\Omega$	0.01 $\Omega$	0.03 – 20.99 $\Omega$	$\pm(2\% + 5)$
	200 $\Omega$	0.1 $\Omega$	0.3 – 209.9 $\Omega$	$\pm(2\% + 5)$
	2000 $\Omega$	1 $\Omega$	3 – 2099 $\Omega$	$\pm(2\% + 5)$
	20k $\Omega$	10 $\Omega$	0.03k – 20.99k $\Omega$	$\pm(2\% + 5)$
	200k $\Omega$	100 $\Omega$	0.3k – 209.9k $\Omega$	$\pm(2\% + 5)$
Auxiliary Earth Spikes				8% of Re + Rh + Rs
Earth Resistivity $\rho$	2 $\Omega$		0.2 – 395.6 $\Omega \cdot m$	$\rho = 2 \times \pi \times a \times Rg$
	20 $\Omega$		0.2 – 3956 $\Omega \cdot m$	
	200 $\Omega$	0.1 $\Omega \cdot m$ - 1 $\Omega \cdot m$	20 – 39.56k $\Omega \cdot m$	
	2000 $\Omega$	Auto-Ranging	0.2 – 395.6k $\Omega \cdot m$	
	20k $\Omega$		2.0 – 1999k $\Omega \cdot m$	
	200k $\Omega$		2.0 – 1999k $\Omega \cdot m$	
Series Interference Voltage Ust	50V	0.1V	0 – 50.9Vrms	$\pm(2\% + 2)$
Frequency	Auto ranging	0.1Hz, 1Hz	40Hz – 500Hz	$\pm(1\% + 2)$
Test Current	80mA (Max)			
Memory capacity	800 data			
Size	167 x 185 x 89mm			
Weight	900g			

## DIGITAL EARTH RESISTANCE TESTER



K4105



The K4105 is a digital ultra-compact earth resistance tester housed in a shock resistant IP54 rated dust and drip proof case. The K4105 has a large, easy to read 3½ digit LCD display and is supplied with a carrying case containing all the equipment needed to perform measurements. There is an automatic warning when resistance of auxiliary earth spikes is in excess of tolerance. 3mA Measuring current permits earth resistance tests without tripping the earth leakage current breakers in the circuit under test.

### Features

- Direct earth resistance to 2000Ω
- Measures earth voltage to 200V
- Indicates if resistance of auxiliary spikes is within tolerance
- 3½ Inch Digital LCD display
- 3mA Measuring current
- Low power consumption for extended battery life
- Direct readout of the earth resistance on the LCD display
- IP54 Protection - Dust & Drip Proof
- Overload protection

Function	Range	Accuracy
Earth Resistance	0.01Ω - 2000Ω	±(2.0% + 3)
Test Frequency	840Hz	
Measuring Current	20Ω RANGE 3mA	
Earth Voltage	0.1V - 200V	±(1.0% + 4)
Size	105 x 158 x 70mm	
Weight	550g	

## DIGITAL EARTH RESISTANCE TESTER



MT330

The MT330 is an ideal earth resistance tester for the measurement of earth rods and lightning conductors. Other ranges have been included such as AC voltage measurement up to 750V and DC voltage up to 1000V, plus a 200kΩ resistance range. The large backlit dual display LCD indicates the range measured as well as the battery voltage. The advanced circuit design permits the instrument to operate with minimum influence from earth voltage and earth resistance of auxiliary spikes. The double mould rubber injection housing ensures that the meter can handle the rough terrain when used in the field while performing earth tests.

### Features

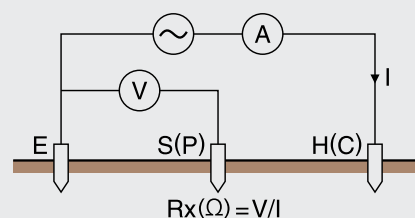
- Earth Resistance 2000Ω
- Earth voltage to 200V
- Indicates if resistance of auxiliary spikes is within tolerance
- Direct readout of the earth resistance on the LCD display
- Measures DCV to 1000V and ACV to 750V
- Overrange indicator
- Zero adjustment of leads
- Data Hold
- Overmould Rubber Casing
- Dual LCD with backlight
- Ideal for earth rods and lightning conductors

Function	Range	Accuracy
Earth Resistance	20Ω - 2000Ω	±(2.0% + 10)
Measuring Current	20Ω Range 3mA	
Earth Voltage	0.1V - 200V	±(3.0% + 3)
Resistance	0.1KΩ - 200KΩ	±(1.0% + 2)
DC Voltage	1V - 1000V	±(0.8% + 3)
AC Voltage	1V - 750V	±(1.2% + 1)
Size	200 x 92 x 50mm	
Weight	700g	



## Principle of Earth Resistance Measurements

This instrument makes earth resistance measurements with fall-of-potential method, which is a method to obtain earth resistance "Rx" by applying AC constant current "I" between the measurement object "E" (earth electrode) and "H(C)" (current electrode), and finding out the potential difference "V" between "E" (earth electrode) and "S(P)" (potential electrode).





# EARTH RESISTANCE TESTER



## EARTH RESISTANCE TESTER

The K4202 measures earth resistance from 0.05 to 1500Ω and can be measured without the auxiliary earth spikes in multi-earthing systems. True RMS leakage or phase current readings from 0.1mA to 30.0A provides vital additional information in earthing networks. The filter function offers increased immunity to electrical noise and a noise mark appears in excessively high noisy environments. The K4202 stores up to 100 measurements and real time measurements can be transferred, shown and saved on an Android device using Bluetooth communication. Saved data includes measurement, GPS location, date and time.

Function	Range	Accuracy
Earth resistance	20.00 – 200 – 1500Ω	±(1.5% + 0.05Ω) [0.00 – 20.99Ω] ±(2% + 0.5Ω) [16.0 – 99.99Ω] ±(3% + 2Ω) [100.0 – 209.99Ω] ±(10% + 10Ω) [400.00 – 599Ω] Accuracy not guaranteed [600 – 1580Ω]
AC Current	100mA – 1000mA – 10A – 30A	±(2% + 0.7mA) [0.0 – 104.9mA] ±(2% + 0.7mA) [80.0 – 1049mA] ±(2% + 0.7mA) [0.8 – 10.49A] ±(2% + 0.7mA) [8 – 31.5A]
Operation Indication	Earth Resistance Function:	Constant voltage injection Current detection (Frequency approx 2400Hz) Dual integration Successive approximation
Response Time	Earth Resistance Function:	7 seconds
	AC Current Function:	2 seconds
Communication Function	Bluetooth Ver 2.1 + EDR Class 2	
Conductor Size	Ø32mm	
Size	246 x 120 x 54mm	
Weight	780g	

### Features

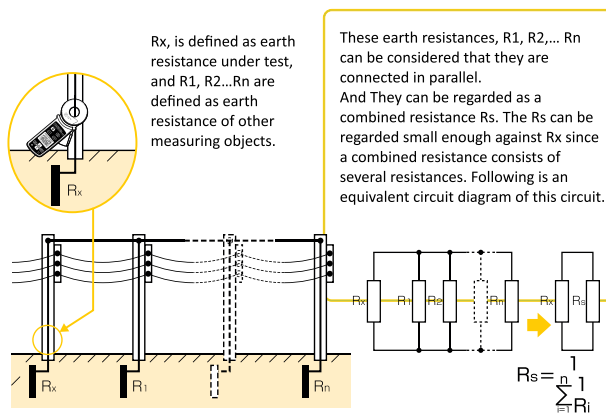
- Easy Earth / Ground resistance measurement
- True RMS readings
- Jaw Ø32mm
- Earth / Ground Resistance 0.05Ω to 1500Ω resolution
- AC A 0.1mA to 30A Resolution
- Noise check function
- 100 Data storage points
- Bluetooth Function



K4202



### Why earth measurements can be found by only clamping it?



A known Voltage V is applied to the object (Resistance R<sub>x</sub>) measured from the voltage injection transformer CT1, and the current I corresponding to the earth resistance is flowed.

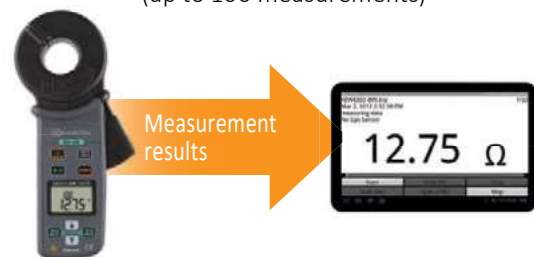
The current I is detected with detection transformer CT2, and object (Resistance R<sub>x</sub>) measured can be put out by the calculation. (refer to the right diagram)

$$V = R = R_x + R_s$$

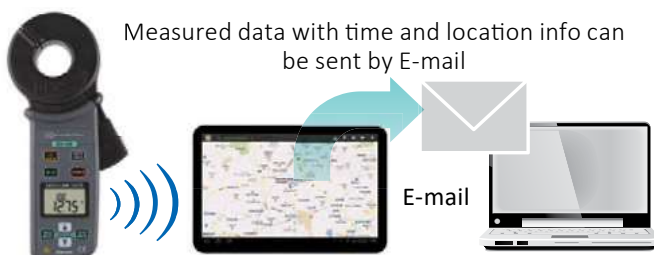
$$R_x \gg R_s = \frac{1}{\sum_{i=1}^n \frac{1}{R_i}}$$

$$V = R_x$$

Recorded data can be transferred (up to 100 measurements)



Measured data with time and location info can be sent by E-mail



GPS data collection may be lost since the GPS signal differs depending on the location of satellites.

To access GPS data and send emails, an Internet connection is required. Communication charges may be incurred separately for using these functions.

Comparator function informs when the measured value is lower/higher than the preset value





K4140



## LOOP & PSC / PFC TESTER

The K4140 incorporates Anti-Trip Technology (ATT) which electronically bypasses RCDs when performing loop impedance tests. This saves time and money by not having to take the RCD out of the circuit when testing and is a safer procedure to follow. With the ATT function enabled, a test current of 15mA or less is applied between Line & Earth. It enables resolution loop impedance measurements (up to 0.01 ohm), without tripping RCDs rated at 30mA and above. A full set of new safety test leads are included, they have an overmould for maximum grip and are extremely robust. The instrument also comes in a soft carry case, a quick reference guide locates on the instrument body, a soft strap belt and is supplied with a calibration certificate.

### Features

- Anti-Trip Technology for complete trip free Loop testing on all RCD's rated 30mA and above
- Dual display allows simultaneous measurements like Loop & PFC/PSC.
- Two wire connections for Loop L-L, L-N and PSC testing is possible.
- Phase rotation, voltage and frequency measurements.
- Lock-down test button for "hands free" testing with auto-start operation.

- Display and front panel keyboards with backlight to be visible in dark places.
- IP54 - Dust & Drip Proof
- PSC/PFC 2000A/20KA

Function	Range	Accuracy
Loop Impedance	0.01Ω - 2000Ω	±(3%+4)
AC Test Current	6A/40mS	±(2.0% + 4)
Phase Rotation	50-500V	
Voltage Measurement	0-500V	
Size	84 x 184 x 133mm	
Weight	860g	



K4118



## LOOP & PSC / PFC TESTER

The K4118 is microprocessor controlled and includes useful features such as mains voltage measurements, neon indication of current wiring status and a lock down test button for hands-free operation. An added feature is a 200 ohm earth electrode resistance test range to check that the earth electrodes comply with the IEC wiring regulations. The K4118 Digital Earth Loop Impedance Tester is the most technologically advanced meter of such instruments available and is designed to comply with IEC 61557-1 regulations. This instrument offers convenient and accurate measurements of Earth Loop Impedance at the origin (Ze) and at various points throughout the electrical installation (Zs).

### Features

- Microprocessor controlled for accuracy and reliability
- Automatic Lock-Out if Test Resistor Overheats
- Direct readout of Prospective Short Circuit Current and Earth Fault Current
- Lock Down Test Button for Continuous use
- Measures low loop impedance of 0.01Ω
- 3 LED's for checking correct wiring status
- Safe voltage measurement function
- Visual indication of reversed phase and neutral wiring at socket
- External earth probe option
- Displays mains voltage

- Supplied with distribution board test leads
- IP54 - Dust & Drip Proof

Function	Range	Accuracy
Loop Impedance	0.01Ω - 2000Ω	±(2.0% + 4)
AC Test Current	20Ω - 25A 200Ω - 2.3A 2000Ω - 15mA	±(2.0% + 4)
PSC Range	200A (2.3A 20mS) 2000A (25A 20mS) 20KA (25A 20mS)	
AC Voltage	110V - 260V	±(2% + 4)
Size	185 x 167 x 89mm	
Weight	750g	



MT350

## LOOP & PSC / PFC TESTER



The MT350 is a handheld microprocessor controlled Loop Impedance and PSC Tester, which includes 3 loop impedance measuring ranges capable of measurements from any point in the installation for comprehensive testing of distribution systems. The MT350 gives a direct readout of PSC and earth fault current to a maximum of 20kA in 3 measuring ranges. Other features include 3 LED's for checking the correct wiring status of the circuit under test and the automatic lockout if the resistors overheat. The meter is supplied in double injection rubber housing.

### Features

- Custom microprocessor controlled for highest accuracy and reliability
- Loop impedance of 2000Ω range measurement is carried out with low test current (15mA)
- Automatic Lock-Out if Test Resistor Overheats
- Direct readout of Prospective Short Circuit Current and Earth Fault Current
- Measures low loop impedance of 0.01Ω
- 3 LED's for checking correct wiring status
- Safe voltage measurement function
- Visual indication of reversed phase and neutral at wiring socket
- Double injection rubber housing

Function	Range	Accuracy
Loop Impedance	0.01Ω - 2000Ω	± (2.0% + 5)
AC test current	20Ω - 25A 200Ω - 2.3A 2000Ω - 15mA	± (2.0% + 5)
PSC Range	0.1A - 200A (2.3A 20mS) 1A - 2000A (25A 20mS) 10A - 20KA (25A 20mS)	± (2.5% + 4)
AC Voltage	50V - 250V	± (2.0% + 5)
Size	200 x 92 x 50mm	
Weight	700g	





## POWER ANALYSERS

### CONTENTS

Power Quality Analysers	52
Power Meters	54
Leakage/Load Data Logger	55
Voltage/Current Data Logger	55



## POWER QUALITY ANALYSER



### Power & Energy



#### Instantaneous value

- Measures instantaneous / average / min / max for voltage, current, active / reactive / apparent power, PF (cos $\theta$ ) and line frequency all on one screen.
- Trend of all main parameters and customized Zoom functions.



#### Integration value

- The display will list the active / reactive / apparent energy in total and for each phase consumed (or generated in case of co-generation like solar panels, etc).



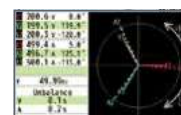
#### Demand

- To support demand control, present energy usage and estimated value are displayed on a graph while recording max demand value and the occurred time.



### Vector

- Can display voltage and current by vector per Ch.



### Waveform

- Displays voltage and current on each Ch by waveform.



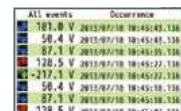
### Harmonics Analysis

- Graphic display of harmonic components up to 50th order for voltage, current and power.

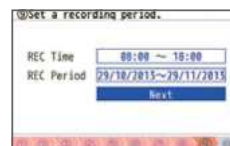
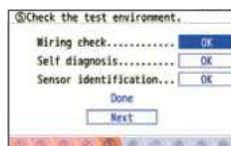
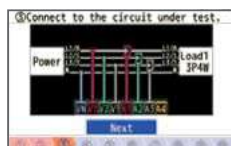
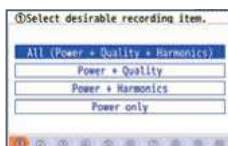


### Event

- Measures voltage swells / dips / interruptions / transients and inrush currents that may indicate a weak power distribution system. Such phenomena may damage or reset devices.
- All necessary data is displayed by pressing one key.



One-Touch START/STOP Key for Quick Start Guide providing easy setup guides.



- Automatic creation of graph and list from recorded data.
- Uniform management of setting and recorded data acquired from multiple devices.
- Data can be expressed in crude oil and CO2 equivalent values in the report.
- EN50160 report can be generated after survey.



### Can you close your distribution board door during surveys?

The K6315 facilitates safe testing by being extremely compact and with two clever option extras: a magnetic case(K9132) for attaching it to the sides of metal enclosures and a power supply adaptor(K8312) which takes the power for the instrument from the supply being measured.



- Measurements can be graphically displayed on Android devices or PC in real-time via Bluetooth communication.

\*Bluetooth is a registered trademark of the Bluetooth SIG, Inc.  
\*Android is a registered trademark of the Google Inc.

### Load current clamp sensors



**K8128**  
• Max 5A  
•  $\varnothing$ 24 mm



**K8127**  
• Max 100A  
•  $\varnothing$ 24 mm



**K8126**  
• Max 200A  
•  $\varnothing$ 40 mm



**K8125**  
• Max 500A  
•  $\varnothing$ 24 mm



**K8124**  
• Max 1000A  
•  $\varnothing$ 68 mm



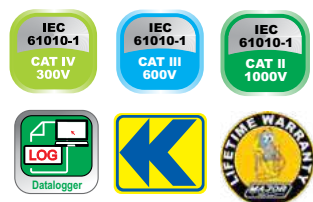
**K8130**  
• Max 1000A  
•  $\varnothing$ 110 mm



**K8135**  
• Max 50A  
•  $\varnothing$ 75 mm



## POWER QUALITY ANALYSER



**K6315-03**



**K6315**



K6315-03 is supplied as a set complete with the K8130 Flexible Load Current Clamp Sensors

Function	Range	Accuracy
Voltage (RMS)	600.0/1000V	$\pm(0.2\% \pm 0.2\%)f.s.$ (sine wave, 40-70Hz)
Allowable Input	1-120% of each range (rms). 200% of each range (peak)	
Display Range	0.15-130% of each range	
Crest Factor	3 or less	
Sampling Speed	2.4 $\mu$ s	
Current (RMS)	100mA-3000A depending on CT selection	
Current resolution	100mA	$\pm(0.2\% \pm 0.2\%)f.s.$ +accuracy of clamp sensor (sine wave, 40-70Hz)
Allowable Input	1-110% of each range (rms). 200% of each range (peak)	
Display Range	0.15-130% of each range	
Crest Factor	3 or less	
Active Power accuracy	$\pm 1.0\%$ reading at power factor 0.5 against power factor 1)	$\pm(0.3\% \pm 0.2\%)f.s.$ +accuracy of clamp sensor (power factor 1 sine wave, 40-70Hz)
Frequency Range	40-70Hz	
PC Communication	USB Ver2.0, Bluetooth Ver 2.1 EDR Class2	
Size	175 x 120 x 68mm	
Weight	900g	

### Features

- The perfect tool for energy saving and power quality control
- Simultaneous Power & Power quality measurements  
Power/ Harmonics/ Waveform/ Power quality are recorded at all CHs. (Voltage: 3ch, Current 4ch)
- Helpful support functions - Quick Start Guide, Wiring check and Sensor detection for easy and reliable measurement
- Measurement with high accuracy  
Guaranteed accuracy:  $\pm 0.3\%$ rdg (energy),  $\pm 0.2\%$ rdg (voltage/ current)
- Complies with the International Standard IEC 61000-4-30 Class S and the European Standard EN50160
- Remote monitoring on PC and Android device
- Remote checking of measurement in real-time is possible via Bluetooth communication.
- Recorded data can be saved in the supplied SD card.
- EN50160 report can be generated after survey by PC software.
- Various Clamp Current Sensors - Various types of clamp and flexible sensors are available: from 1000mA Range up to 3000A Range and Earth leakage measurements
- Energy consumption check on site - Trend and demand graphs for easy recognition.
- TFT color display with high resolution.
- IEC 61010-1 CAT IV 300V, CAT III 600V, CAT II 1000V

- SD cards up to 2GB can be used



Possible recording time when the 2GB of SD is used:

Interval	REC item	
	Power	+Harmonics
1 sec	13 days	3 days
1 min	1 year or more	3 months
30 min	10 years or more	7 years or more

- Data of power quality events are not considered to estimate the possible recording time. The max possible time will be shortened by recording such events.

### Load current flexible clamp sensors



**K8133**  
• Max 3000A  
•  $\varnothing$ 150 mm



**K8312**  
• Power Adaptor



**K9132**  
• Magnetic Case

## POWER METER

The perfect tool for energy saving and power quality control

### Features

- Comprehensive real-time monitoring, recording and analysis of single and 3-phase systems
- Voltage, Current, Power Factor and Frequency measurements
- Power analysis (Active, Apparent and Reactive power)
- Energy analysis (Active, Apparent and Reactive energy)
- Active power accuracy:  $\pm 0.3\% \text{rdg} \pm 0.2\% \text{f.s.}$
- Automatic wiring check function to prevent incorrect connections
- Large memory capability (2 GB) using built-in SD card Interface
- Recording interval can be set between 1 second and 1 hour.
- Real time & remote measurements using Android application
- Windows software for data analysis and setting via USB port or Bluetooth
- Synchronous measurements between two units of K6305
- Wide selection of clamp sensors allow measurements from 0.1A to 3000A
- The instrument automatically recognizes what kind of clamp sensor is connected to it
- Double power supply system via AC line and batteries
- K6305 is supplied with 3 x K8125 Clamp Sensors



K6305



Function	Range	Accuracy
Measurements & Parameters	Power factor (cos $\theta$ ), Neutral current	
Voltage (RMS)	150.0/300.0/600.0V	$\pm(0.2\% \pm 0.2\%) \text{ f.s. (sine wave, 45-65Hz)}$
Allowable Input	1-110% of rating range (rms).	
Display Range	5-130% of each range	
Sampling Speed	2.4 $\mu$ s	
Current (RMS)	10.00/50.00/100.0/200.0/500.0/Auto with K8125	
Allowable Input	1-110% of rating range (rms).	
Display Range	1-130% of each range	
Crest Factor	3 or less	$\pm(0.3\% \pm 0.2\%) \text{ f.s.} + \text{accuracy of clamp sensor} + 1\% \text{f.s. when the lowest}$
Active Power accuracy	current ranges is selected.	
Frequency Range	40-70Hz	
PC Communication	USB Ver2.0, Bluetooth Ver 2.1 EDR Class2	
Size	175 x 120 x 68mm	
Weight	800g	

### As easy as 1 ...2 ...3 !

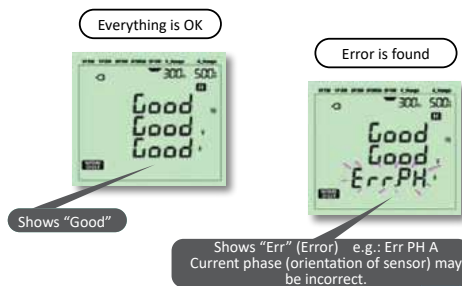
Starting from OFF position and rotating the Rotary switch clockwise, K6305 is ready to use in 3 simple steps

#### 1. Set up

Rotate the Rotary switch to SET UP. All the instrument settings can be easily selected by using instrument buttons. All the settings can also be selected by connecting K6305 to a PC via USB or Bluetooth.

#### 2. Wiring Check

Rotate the Rotary switch to WIRING CHECK. The Automatic Wiring check function will prevent incorrect connections, check the connections and display the results on the LCD. Error messages appear on display to indicate wrong orientation of Clamp sensors or incorrect connections.



#### 3. W/Wh/DEMAND Measurements

Rotate the Rotary switch to W/Wh/DEMAND. The instrument can perform Instantaneous, Integration and DEMAND measurements. START / STOP button to start / stop recording

### Bluetooth communication with Android application

Free Android software "KEW Smart 6305" is available on download site



\*communication charges may be incurred separately to download application

Real time & remote measurements using Android application. Measurement can be displayed in graphic or numeric forms on Android devices in real-time via Bluetooth communication. Remote checking of measurements is possible without accessing K6305.



Max communication distance: 10m  
Supporting Android ver. 2.2 - 4.4  
Bluetooth is a registered trademark of the Bluetooth SIG, Inc.  
Android is a registered trademark of the Google Inc.

### Windows software

Automatic creation of graph and list from recorded data. Uniform management of setting and recorded data acquired from multiple devices. Data can be expressed in crude oil and CO<sub>2</sub> equivalent values in the report.



System requirements:  
OS: Windows® Vista/7/8/10  
Display: XGA(Resolution 1024x768 dots) or more  
Hard-disk: space required 1Gbyte or more  
Other: With CD-ROM drive and USB port  
.NET Framework (3.5 or more)

\* Windows® is a registered trademark of Microsoft in the United States.



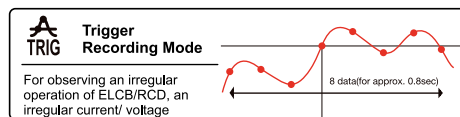
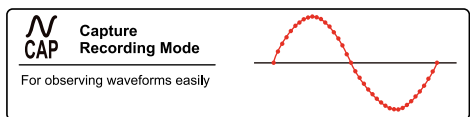
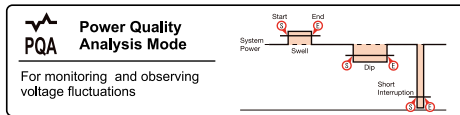
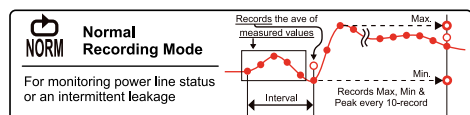
## LEAK/LOAD CURRENT LOGGER



The K5020 is a 3 channel data logger for multiple parameters recording of voltage and or current. The clamp sensors and or voltage sensors can be connected to any of the 3 channels as the logger will automatically identify the sensors connected. The Power Quality analysis mode is for 1 Phase only: Reference Voltage, Swell, Dip and Short Power Interruptions. Variation of the measured voltage and current data can be confirmed simultaneously on the PC display monitor. Supplied with the user friendly software KEW LOG Soft 2, the recorded data can be transmitted to a PC directly by using the USB connection, whereby the data can then be edited for analysis and graphically displayed.

### Features

- Stores 60 000 data points
- 1 $\emptyset$  Power quality analysis
- LED flickers when the preset current/voltage value is exceeded
- Lowpass Filter will filter out the higher frequency harmonics
- Download data to PC via USB Interface cable



K5020

### Optional Accesories

#### Load current clamp



**K8121**  
• Max 100A  
•  $\emptyset$ 24 mm



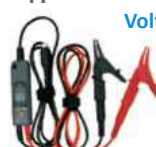
**K8122**  
• Max 500A  
•  $\emptyset$ 40 mm



**K8130**  
• Max 1000A  
•  $\emptyset$ 110 mm



**K8123**  
• Max 1000A  
•  $\emptyset$ 55 mm



**Voltage sensor**  
**K8309**  
• Voltage Sensor

#### Leakage & Load current clamp



**K8146**  
• Max 30A  
•  $\emptyset$ 24 mm



**K8147**  
• Max 70A  
•  $\emptyset$ 40 mm



**K8148**  
• Max 100A  
•  $\emptyset$ 68 mm

K8146/8147/8148 can measure up to 10A for use in K6315

Function	Range	Accuracy
Measurements & Parameters	Voltage, Current, Normal, Trigger, Capture, Power Quality Analysis.	
Voltage (RMS)	600.0V	
Allowable Input	50/60Hz, 10% or more of the range Ch1	
Display Range	0-105% of each range	
Crest Factor	2.5 or less:RMS (sine)	+2% +1%f.s. 95% or less of each range
Sampling Speed	100mS	
Current (RMS)	100mA-1000A depending on CT selection	
Current resolution	0.1mA	
Allowable Input	0-105% of each range	
Display Range	0-105% of each range	
Crest Factor	2.5 or less:RMS (sine)	+2% +1%f.s. 95% or less of each range
Active Power accuracy	$\pm(0.3\% \pm 0.2\%)$ f.s. +accuracy of clamp sensor	
PC Communication	USB Kew Log Soft 2	
Size	111 x 60 x 42mm	
Weight	265g	

## DATA LOGGER

The MT250 is designed for easy of use in recording AC Voltage and Current. The Logger can be programmed simply via USB interface from your PC. 1 second rapid sampling rate variable to 24 hours. LCD display of Voltage or Current for quick reference checks.

### Features

- Magnetic back plate for easy of attachment to metal surfaces
- Each channel can record up to 50022 data
- Date and Time Stamp
- Graphical and Printed Text information
- Battery or AC power supply

Function	Range	Accuracy
Measurements & Parameters	Voltage, Current.	
Voltage (RMS)	6 - 600.0V	$\pm(2\% \pm 1V)$
Allowable Input	50/60Hz, 10% or more of the range Ch1	
Display Range	0-105% of each range	
Crest Factor	2.5 or less:RMS (sine)	+2% +1%f.s. 95% or less of each range
Sampling Speed	1second to 24Hour	
Current (RMS)	2 - 200A	
Frequency Range	40 - 1KHz	
PC Communication	USB	
Size	114 x 63 x 34mm	
Weight	248g	



MT250

# ELECTRICAL TESTERS

## CONTENTS

Industrial RCD (ELCB) Testers	57
RCD & ELCB Testers	58
Phase Rotation Meters	58
Voltage Testers	60
Voltage Detectors	62
Circuit Breaker Finder	63
Continuity & Bell Tester	63
Solenoid Tester	63
Battery Tester	63
Contractor Test Kits	64





# INDUSTRIAL RCD/ELCB TESTERS



## INDUSTIRAL RCD (ELCB) TESTER

The K5410 is a Microprocessor controlled Industrial Earth Leakage tester designed to operate on 550V, 380V and 220V systems, or circuits with a maximum of 450V AC (L-E). The K5410 measures trip current by varying the current automatically. A great feature is remote testing which enables the user to hold the test leads with both hands by locking the test button; measurement will automatically start when the main voltage is detected. The K5410 detects the voltage to Earth electrodes or Protective conductors during RCD test, when applying test currents, at measurement using Earth in order to prevent electrical shocks cause by the damaged earth. Measurement will cease at 50V AC or more. Ideally suited for Mining and Industrial use.

### Features

- Microprocessor controlled
- Operating voltage 80V - 450V L-E
- Auto Ramp
- 0° or 180° Phase angle selection
- Rated current 10mA - 500mA
- Automatically measures trip current
- Remote testing
- IP54 - Dust & Drip Proof
- K5410IS Intrinsically Safe Version Available

Function	Range	Accuracy
Rated trip current	10 - 30 - 50 - 100 - 200 - 500mA	±(1.0% + 3)
Other Test Settings	X½ - 5/15/25/50/100/250mA	±(1.0% + 3)
	X 1 - 10/30/50/100/200/500mA	±(1.0% + 3)
	X 5 - 10/30/50/100mA	±(1.0% + 3)
	Auto Ramp - 10/30/100/200/500mA	±(1.0% + 3)
Operating Voltage	80V - 450V (L - E)	
Fault Trip Time	2000ms (200ms FOR X5)	
Phase Angle Setting	0° OR 180°	
AC Voltage Range	80V - 450V	
Size	186 x 167 x 89mm	
Weight	965g	



K5410  
K5410IS



## INDUSTIRAL RCD (ELCB) TESTER

The MT328 is a Microprocessor controlled Industrial Earth Leakage tester designed to operate on 550V, 380V and 230V systems, or circuits with a maximum of 450V AC (L-E). The MT328 has been designed for ease of operation while still maintaining safety, reliability and accuracy thus providing consistent results throughout all operating ranges. The MT328 offers both the Trip Time and the Sensitivity at which the ELCB tripped. The Trip can be timed to a maximum of 100 Seconds, while the sensitivity can either be set at a certain milli amp rating or the operator can simply let the instrument ramp to 1000mA. It is important to select the appropriate phase angle when performing ELCB tests, for this reason the MT328 has the 0° or 180° selection which is graphically displayed on the LCD. Once the test has been completed, the user can view the result and circuit voltage, either the disconnect time or milliamp sensitivity as well as the trip polarity of the ELCB on the LCD Display. The MT328 is ideally suited for Mining, Industrial and Domestic applications.

### Features

- Microprocessor Controlled for accuracy and reliability
- Direct readout of disconnection time
- Display mA Sensitivity
- Current Setting from 5mA to 1000mA
- Indicates tripping phase angle
- 0° or 180° Phase angle selection
- Operating voltage 100V to 450V L-E
- Checks ELCB trip time and trip point sensitivity
- Auto Off
- Built-in 100s Timer
- MT319 is an optional 3-Phase adaptor

Function	Range	Accuracy
Rated trip current	5mA - 1000mA	± (1.0% + 1mA)
Other Test Settings	0 ~ 1000mA IN 1mA STEPS or Preset	
Operating Voltage	100V - 450V (L - E)	
Fault Trip Time	0 Seconds ~ 100 Seconds	
Phase Angle Setting	0° OR 180°	
Trip Polarity	Displays If ELCB Tripped On + Or - Edge Of Waveform	
AC Voltage Range	100V ~ 450V	
Size	170 x 120 x 95mm	
Weight	800g	



MT328

### 3-PHASE ROTARY SWITCH ADAPTOR FOR MT328

The MT328 is a powerful meter when used for testing Industrial Earth Leakage devices. The test procedure is quite simple when performing tests on the open terminals between L1 and Earth, L2 and Earth and L3 and Earth as the test leads can simply be connected to each phase. Simply connect the black lead with the crocodile clip to the Earth terminal and the Red prod to the Phase terminal under test, the test button can then be pressed to either determine the trip time or the mA leakage current.

However in more industrial applications where an ELCB test needs to be performed on Industrial sockets etc, where there are 3-phase circuits, it is cumbersome to try perform the test due to space issues plus encountering the spring loaded cover of the socket, for this reason the MT319 3-Phase Socket Adaptor was developed. The MT319 allows for standard 4mm test leads to be connected to the MT328, and any type of Industrial plug to be connected to the open ends of the cable. Once the plug has been inserted into the industrial socket, one can begin the test. There is a rotary switch on the side of the MT319 where the user can select L1, L2 or L3 of 3-phase circuits for testing.

Where a number of different industrial plugs are required for different testing purposes, one can simply use more MT319 adaptors. The MTKBAG Heavy Duty Meter Bag is the ideal carrying case for housing the MT328 and all the MT319 adaptors.



MT319





MT325

## SOCKET RCD TESTER



The compact MT325 is lightweight and easy to use and operates on 230V AC circuits while offering high accuracy measurement and good performance. Features include pre-programmed tripping current ranges for speed of use, with direct readout of disconnection time with a resolution of 1ms, neon indication of correct wiring status. Consistent results are obtained with the 0° and 180° phase angle select switch, thus eliminating the need for repeat tests.

### Features

- Double injection housing
- Correct wiring indication
- 2000ms Direct readout of disconnection time
- Fully programmed test current settings
- Accurate readout of tripping time with a resolution of 1ms
- Two LED lamps give quick check for correct wiring
- Compact, lightweight and simple to use
- 0° or 180° Phase angle selection
- Current setting from 5mA to 500mA
- Operating voltage 230V AC
- Data Hold function to freeze the digital trip time on the LCD

Function	Range	Accuracy
Rated trip current	5mA - 10mA - 30mA - 100mA - 300mA - 500mA	±(3.0%)
Other Test Settings	No Trip - 50% Range Selected Trip Test - 5/10/30/100/300/500mA Fast Trip - 250mA	±(5.0%)
Operating Voltage	230V ± 10% 50/60Hz	
Fault Trip Time	2000ms for Trip and No Trip Tests 40ms for Fast Trip	
Phase Angle Setting	0° OR 180°	
Size	130 x 69 x 32mm	
Weight	130g	



MT310

## SOCKET ELCB TESTER



The MT310 Earth Leakage Tester is a compact, lightweight and easy to use socket and polarity and earth leakage tester that tests 3-wire 230V AC circuits and Earth Leakage Circuit Breakers. A unique feature is the AC Voltage indication on the LCD display. It also features a milli-amp (mA) trip setting with a separate test button. The unit can be set from 10mA, used for testing saturation and to eliminate nuisance tripping, to 35mA. The bright neon indication assists the user in confirming the wiring status of the circuit under test. Simply plug the MT310 into a wall socket and the results are clearly displayed. For additional safety, the MT310 is rated at CAT IV 300V and CAT III 600V.

### Features

- Compact, lightweight and easy to use
- Correct Wiring Indication with neon lights
- Operates on 230V systems
- AC Voltage measurement on LCD display
- Fixed current settings from 10mA to 35mA
- Separate test button
- Double injection rubber housing

Function	Range	Accuracy
ELCB Trip Ratings	10mA - 15mA - 20mA - 25mA - 30mA - 35mA	± 1.75mA AT 220V AC
AC Voltage Indication	From 150V AC to 245V AC	
Wiring Identification		
• • •	• • • Wiring Correct	
Neon On	• • • No Earth	
• • •	• • • Live and Neutral Reversed	
Neon Off	• • • No Neutral	
	• • • Live And Earth Reversed	
	• • • No Live	
Size	130 x 69 x 32mm	
Weight	130g	



K8031F

## PHASE ROTATION METER



The K8031F has a rotary disc indication and is designed to check phase sequence on 3-phase systems, with a wide range from 110V to 600V AC. Neon lamps provided on the unit confirms whether a phase is open or to ensure the correct connection. The K8031F is small, lightweight and portable, designed for maximum ease of operation and ruggedness throughout. The large croc clips are ideal for holding onto terminals of switchboards.

### Features

- Rotary disc indication
- Fused test leads included
- 3-Phase neon indication
- Checks phase sequence and open phase simultaneously
- Sealed against dust, the unit ensures reliable performance
- Small lightweight and portable
- Can check a wide range of 3-phase power source from 110V to 600V AC
- Large size fused crocodile clips

Function	Range
AC Voltage	110V - 600V
Frequency	50/60Hz
Phase Display	110V - 600V
Operating Time	5 Minutes AT 500V
3 Phase Indication	Rotary Disc
Size	106 x 75 x 40mm
Weight	350g



# PHASE ROTATION METERS



## MOTOR & PHASE ROTATION METER



The MT935 is a compact handheld Motor and Phase Rotation indicator, which is battery operated. The unit can be utilized on a 3 Phase powered system or on a 3 Phase unpowered motor without having to worry about damage to the tester. When used on a 3 Phase powered system the meter is a field indication instrument which displays all three phases by lighting up its corresponding lamp. It then displays the rotation for clockwise or anti-clockwise on an LED. In 3 Phase motors it is possible to determine the motor connections U, V and W without mains voltage present, thus avoiding damage to pumps with reversed motor rotation. It operates from 1VAC to 400VAC.

### Features

- LED Indication
- Rotary field direction
- 3-Phase neon Indication
- Determines Motor Connection and magnetic Field Detection
- Double injection rubber housing
- Small lightweight and portable
- Voltage range from 1VAC to 400VAC
- Large size crocodile clips

Function	Range
AC Voltage	1V - 400V
Frequency	2Hz - 400Hz
Phase Display	120V - 400V
Operating Time	Continuous
3 Phase Indication	LED
Size	130 x 69 x 32mm
Weight	130g



MT935

## PHASE ROTATION METER



The MT930 is a compact handheld Phase Rotation indicator that has a large LCD to indicate the phase presence and rotation. Once connected to a 3 Phase power system, the meter indicates the phase sequence by displaying its corresponding phase symbol on the LCD, as well as the rotation by arrows indicating a clockwise or anti-clockwise direction. The MT930 operates from 40VAC to 690VAC.

### Features

- Large LCD Display
- Phase rotation indication
- 3-Phase Indication
- Checks phase sequence and open phase simultaneously
- Double injection rubber housing
- Small lightweight and portable
- Can check a wide range of 3-phase power source from 40V to 690V AC
- Large size crocodile clips

Function	Range
AC Voltage	40V - 690V
Frequency	15Hz - 400Hz
Operating Time	Continuous
3 Phase Indication	LCD
Size	130 x 69 x 32mm
Weight	130g



MT930

## NON-CONTACT PHASE ROTATION METER

The K8035's technology and the first non-contact phase rotation tester permits safe testing of phase rotation without the need to expose live contacts. The unit requires no metal contact ideal for safer and faster testing. Super bright mode gives clear indication even in bright sunlight. K8035 uses a combination of LED and audible tones to indicate phase direction. Green LEDs are used for clockwise direction with an intermittent tone. Red LEDs are used for anti-clockwise direction with a continuous tone. The tester is suitable for a wide range of 3 phase installations from 70V to 1000V AC. It comes with a magnetised back for attachment to a metallic surface for hands-free testing.

### Features

- The insulated crocodile clips can clip insulated cables from Ø2.4 to 30mm
- Phase rotation is indicated by the rotary illumination of LED's and logical Audible tones
- Can be fixed to a metal panel via the magnet on the back side
- Wide measuring range for 3 phase installations from 70V to 1000V AC
- Super bright LED's allows clear indication even in sunlight

Function	Range
AC Voltage	70V - 1000V
Clamp diameter range	Ø2.5 - 30mm
Detection Method	Electrostatic Induction
Mesuring Frequency	45 - 66Hz
Phase rotation	Clock or Anti clock
Visual Indication	Super Bright LED's, audio
Colours	Red White Blue
Size	122 x 61 x 36mm
Weight	380g



K8035



MT476

## 690V AC/DC VOLTAGE TESTER



The MT476 is IP64 and is a useful tester designed to meet electrician's requirements for a multitude of applications. The tester operates without a switch and by simply placing the probes onto the circuit under test, the meter automatically turns on and displays the voltage on a 2000 count display and quick indication can be viewed on the analogue bargraph. The MT476 incorporates a Low Impedance Test, which induces a basic load of approximately 6kΩ at 690 volts. The voltage tester can show the direction of the rotating field with three-phase systems. The applied voltage and the rotating field direction is shown on the LCD display, with corresponding rotating field direction L = anticlockwise and R = clockwise. The tester can be used as a Single Pole phase tester and measure continuity up to 400kΩ plus RCD Test. The MT476 meets the CAT IV 600V and CAT III 1000V safety standards.

### Features

- AC & DC Voltage detection from 6V to 690V
- Phase Rotation
- 2000 Count LCD display
- Double Injection IP64 housing
- Low Impedance test
- Built-in Flashlight
- Polarity Detection
- Rotary Field indication
- Continuity test to 400kΩ

Function	Range
DC Voltage	6V - 690V
AC Voltage	6V - 690V
Continuity	<400kΩ
Frequency	50/60Hz
RCD Trip	10mA/30mA
Low Impedance	<6kΩ
Response Time	0.1S
Display	2000 COUNT LCD
Size	240 x 78 x 40mm
Weight	237g



MT474

## 690V AC/DC VOLTAGE TESTER



The MT474 is IP64 and is a useful tester designed to meet electrician's requirements for a multitude of applications. The tester displays the voltage on red LED's which increment as the voltage increases. There is an LED indication for polarity when DCV is measured. No switching of the meter on as the tester automatically turns on when voltage is applied to the two test probes. The MT474 incorporates a Low Impedance Test, which induces a basic load of approximately 6kΩ at 690 volts. The voltage tester can show the direction of the rotating field with three-phase systems, with the direction of field shown as L = anticlockwise and R = clockwise. The tester can be used as a Single Pole phase tester and measure continuity up to 400kΩ plus RCD Test. The MT474 meets the CAT IV 600V and CAT III 1000V safety standards.

### Features

- AC & DC Voltage detection from 12V to 690V
- Phase Rotation
- LED display
- Single pole phase test set
- Double Injection IP64 housing
- Low Impedance test
- Built-in Flashlight
- Polarity Detection
- Rotary Field indication
- Continuity test to 400kΩ

Function	Range
DC Voltage	12V - 690V
AC Voltage	12V - 690V
Continuity	<400kΩ
Frequency	50/60Hz
RCD Trip	10mA/30mA
Low Impedance	<200kΩ
Response Time	0.1S
Display	14 LED
Size	240 x 78 x 40mm
Weight	237g



MT472

## 690V AC/DC VOLTAGE TESTER



The MT472 is IP64 and is a basic voltage tester designed to meet electrician's requirements for the measurement of AC and DC voltage and continuity. The tester displays the voltage on red LED's which increment as the voltage increases. There is an LED indication for polarity when DCV is measured. No switching of the meter on as the tester automatically turns on when voltage is applied to the two test probes. The MT472 incorporates a Low Impedance Test, which induces a basic load of approximately 6kΩ at 690 volts. The MT472 meets the CAT IV 600V and CAT III 1000V safety standards.

### Features

- AC & DC Voltage detection from 12V to 690V
- LED Indication
- Double Injection IP64 housing
- Low Impedance test
- Built-in Flashlight
- Polarity Detection
- Voltage function operates without battery

Function	Range
DC Voltage	12V - 690V
AC Voltage	12V - 690V
Frequency	50/60Hz
RCD Trip	10mA/30mA
Low Impedance	<6kΩ
Response Time	0.1S
Display	11 LED
Size	240 x 78 x 40mm
Weight	237g



# VOLTAGE TESTERS



## 1000V AC/DC VOLTAGE TESTER



The MT478 is a 2-Pole voltage, continuity and phase tester with rapid LED indication of voltage levels. The backlit LCD display offers the user accurate voltage measurements. The voltage range is from 12V to 1000V AC/DC on LED indication and 6V to 1000V AC/DC on LCD display. When AC/DC Voltage is detected the meter has three ways to indicate the voltage, visual display (LED and LCD), sound and vibration when the load buttons are pressed. The vibration operates similar to traditional solenoid type voltage testers and meets IEC1010-1 CAT IV 600V safety requirements. The MT478 has a rotary field detection for testing 3-Phase systems as well as a single pole Phase Test. Other features include a built-in flashlight, Continuity Buzzer, Diode Test and RCD Test. High Quality heavy duty molded IP64 case, a thicker cord with wear indicator and well fitted and durable probe protector.

### Features

- 2000 Count LCD display
- LED Indication to 12V to 1000V AC/DC
- Fixed impedance -200kΩ ( $\leq 3,5\text{mA}@1000\text{V}$ )
- Switchable load by 2 push buttons (30mA@230V)
- Vibration during load
- Rotary field direction
- Flash light
- 4mm probe tip thickness

Function	Range	Accuracy
DC Voltage	12V to 1000V	$\pm(3.0\% +5)$
AC Voltage	12V to 1000V	$\pm(3.0\% +5)$
Rotary field	100V to 400V	
RCD Test	30mA@230V	
Resistance	0-1999Ω	
Continuity resolution	$\leq 400\text{k}\Omega$	
AC Bandwidth	50/60Hz	
Digital Display	2000 LCD	
Low Input impedance	$<6\text{k}\Omega$	
Size	240 x 78 x 30mm	
Weight	237g	



MT478

## 1000V AC/DC VOLTAGE TESTER



The MT473 is a 2-Pole voltage, continuity and phase tester with rapid LED indication of voltage levels. The voltage range is from 12V to 1000V AC/DC on LED indication. When AC/DC Voltage is detected the meter has three ways to indicate the voltage, by LED visual display, sound and vibration when the load buttons are pressed. The vibration operates similar to traditional solenoid type voltage testers and meets IEC1010-1 CAT IV 600V safety requirements. The MT473 has a rotary field detection for testing 3-Phase systems as well as a single pole Phase Test. Other features include a built-in flashlight, Continuity Buzzer, Diode Test and RCD Test. High Quality heavy duty molded IP64 case, a thicker cord with wear indicator and well fitted and durable probe protector.

### Features

- LED Indication to 12V to 1000V AC/DC
- Fixed impedance -200kΩ ( $\leq 3,5\text{mA}@1000\text{V}$ )
- Switchable load by 2 pushbuttons (30mA@230V)
- Vibration during load
- Rotary field direction
- Flash light
- 4mm probe tip thickness

Function	Range	Accuracy
DC Voltage	12V to 1000V	$\pm(3.0\% +5)$
AC Voltage	12V to 1000V	$\pm(3.0\% +5)$
Rotary field	100V - 400V	
RCD Test	30mA@230V	
Resistance	0-1999Ω	
Continuity resolution	$\leq 400\text{k}\Omega$	
AC Bandwidth	50/60Hz	
Low Input impedance	$<6\text{k}\Omega$	
Size	240 x 78 x 30mm	
Weight	237g	



MT473

## 690V AC VOLTAGE TESTER



The MT470 is a combined two-pole tester for Continuity and Voltage measurements. The instrument automatically will turn on when the probes are placed across a complete circuit, it then selects between Continuity or AC/DC Voltage and has an LED indication for AC and DC voltage levels. Supplied with a rubber holster to handle everyday knocks and drops. The holster ensures that the tips of both probes are correctly spaced to measure the voltage from all the different plug sockets around the world.

### Features

- Automatically selects ACV, DCV or Continuity test
- Measures DCV from 6V to 220V
- Measures ACV from 12V to 690V
- LED Indication
- Continuity buzzer
- Auto Power Off
- 1MΩ input impedance
- Polarity Detection

Function	Range
DC Voltage	6V - 220V
AC Voltage	12V - 690V
Continuity	0 to 85KΩ
Frequency	50/60Hz
Input Impedance	1MΩ
Response Time	0.1S
Display	11 LED
Size	240 x 78 x 40mm
Weight	237g



MT470



MT405EX



EX II 2 G EX ib IIB T4 Gb

## NCV DETECTOR

The MT405EX is an intrinsically safe NCV Voltage Detector for use in potential explosive environment. The MT405EX is certified in accordance with the ATEX directive EX II 2 G EX ib IIB T4 Gb in Zones 1 and 2. The NCV voltage detector has a dual range, a low measuring range down to 12 volts and a high measuring range from 12V to 1000V. Suitable for outlets or against wire insulation testing, this non-contact AC Voltage Detector has a switch to turn the unit on and a Green LED indicates it is working. There is a Red LED, an audible sound as well as a vibration to indicate the presence of voltage. It has a rugged double moulded IP67 waterproof housing that can withstand a 2m drop. There is a bright built-in LED flashlight ideal for use in dimly lit areas.

### Features

- 12V to 1000V detection
- Thinner probe tip for working with socket outlets
- Green LED means Power on, flashing red LED with beeper and Motor vibration, means Voltage detected
- Two modes, green indicates high voltage mode, Yellow LED 12V Mode
- Flash and beep rate increases as the detector gets closer to the voltage.
- Power On/Off with silent mode
- IP67 waterproof and withstand a 2m drop-proof

Function	Range
AC Voltage	12V - 1000V
Frequency	50/60Hz
Voltage Detector	100V -1000V Red LED audible beep
Voltage Detector	12V -1000V Yellow then Red LED audible beep
Size	160 x 23 x 25mm
Weight	55g



MT403

## NCV DETECTOR

The MT403 is a Non-Contact AC Voltage detector with dual ranges, a low measuring range down to 12 volts and a high measuring range from 12V to 1000V. Suitable for outlets or against wire insulation testing, this non-contact AC Voltage Detector has a switch to turn the unit on and a Green LED indicates it is working. There is a Red LED and an audible sound to indicate the presence of voltage. It has a rugged double moulded IP67 waterproof housing that can withstand a 2m drop. There is a bright built-in LED flashlight ideal for use in dimly lit areas.

### Features

- 12V to 1000V detection
- Thinner probe tip for working with socket outlets
- Green LED means Power on, flashing red LED with beeper means Voltage detected
- Two modes, green indicates high voltage mode, Yellow LED 12V Mode
- Flash and beep rate increases as the detector gets closer to the voltage.
- Power On/Off with silent mode
- IP67 waterproof and withstand a 2m drop-proof

Function	Range
AC Voltage	12V - 1000V
Frequency	50/60Hz
Voltage Detector	100V -1000V Red LED audible beep
Voltage Detector	12V -1000V Yellow then Red LED audible beep
Size	160 x 23 x 25mm
Weight	55g



MT402

## NCV DETECTOR

The MT402 is ideal for checking the presence of voltage from 50V to 1000V. Suitable for outlets or against wire insulation testing, this non-contact AC Voltage Detector has a switch to turn the unit on and a Green LED indicates there is power and the batteries are ok. The Red LED and an audible sound indicates the presence of voltage. A great feature is the built-in flashlight.

### Features

- 50V - 1000V AC
- Easy to use just touch the tip to an outlet or cord, when it glows red the tip will indicate there is voltage in the line
- Audible green light that indicates voltage detection is on
- Detects voltage without metallic contact
- All outer surfaces are non-conductive for safety
- Built-in LED flashlight
- Pocket size

Function	Range
AC Voltage	50V - 1000V
Frequency	50/60Hz
Voltage Detector Visual	Red LED
Voltage Detector Audible	Continuous Beep
Power On Indicator	High Intensity Green LED
Size	158 x 21 x 25mm
Weight	34g



MT401

## NCV DETECTOR

The MT401 is capable of detecting the presence of live wires before testing, this pocket-size AC voltage detector features a low-profile tip that can be inserted into outlet receptacles or used to trace along wire insulation to locate breaks. This detector measures from 200 to 1000 VAC with a visual flashing red LED. It has a rugged double moulded housing, and a bright built-in LED flashlight ideal for use in dimly lit areas.

### Features

- 200V - 1000V AC
- Easy-to-use just touch the tip to an outlet or cord, when it glows red, it indicates there is voltage in the line
- Detects voltage without metallic contact
- All outer surfaces are non-conductive for safety
- Built-in LED flashlight
- Fits into shirt pocket for convenience

Function	Range
AC Voltage	200V - 1000V
Frequency	50/60Hz
Voltage Detector Visual	Red LED
Size	176 x 26 x 25mm
Weight	48g



MT400

## NCV DETECTOR

Use MT400 to quickly check for the presence of live wires before performing any electrical testing. Suitable for outlets or against wire insulation testing, this AC Voltage Detector for non-contact detection of AC Voltage from 50 to 600V (50/60Hz). The Red LED in the tip indicates the presence of voltage.

### Features

- 50V - 600V AC
- Indicates if voltage is present at plug sockets and light switches
- Ideal for industrial uses such as checking voltage on earth leakages, breakers, fuses and contactors
- Ideal for checking breaks in wires and cables
- Ideal for checking that plug sockets and light switches are earthed
- Indicates exactly where the "LIVE" phase has broken

Function	Range
AC Voltage	50V to 600V
Frequency	50/60Hz
Voltage Detector Visual	Red LED
Size	158 x 21 x 25mm
Weight	48g





CIRCUIT BREAKER FINDER



The MT190 is a Circuit Breaker Finder system that operates on energized circuits, consists of a Transmitter, which plugs into the socket on the circuit you wish to isolate and a Receiver Scanner. The Transmitter sends signals along the cable to the distribution board, the operator simply runs the Receiver Scanner along the circuit breakers or fuses, and the scanner will automatically identify the correct breaker by means of a green LED and a continuous buzzer tone. An added feature is the convenient chart printed on the Transmitter that helps determine the wiring condition of the socket outlet, based on the LED lights results. Conditions indicated are Correct Wiring, Open Ground, Reverse Polarity, Open Live, Open Neutral and reverse Live and Ground. There is also a 30mA RCD test function built into the MT190 Transmitter.

Features

- Automatic scanning technology
- Identifies Circuit Breakers & Fuses
- Microprocessor is self-calibrating
- Operates on 240VAC 50Hz circuits
- Built-in 30mA RCD Test in Transmitter
- Correct wiring indication
- Visual and audible indication

Function	Range
Operating Voltage	200 to 240V AC
Operating Frequency	50Hz
RCD (ELCB) Trip Rate	30mA
Size	Receiver: 196 x 55 x 36mm Transmitter: 82 x 51 x 33mm
Weight	Receiver: 148g Transmitter: 140g



MT190

CONTINUITY & BELL TESTER

The MT100 is a continuity bell tester that allows a single user to quickly identify and label two wires even when the wire ends are located in different rooms. The meter is simple to operate and with proper use will provide years of reliable service. Ideal instrument for electricians, alarm technicians, HVAC installers and many other applications.

Features

- Remotely identify and label two wires using flashing remote probes
- Distance 3000m (26 Gauge min)
- Lightweight and pocket size

Function	Range
Display	Remote continuity, red/green bi coloured LED
Green	Power on indicator
RED	Local Continuity Flashing Red
Continuity	Visual and Audio
Low battery indication	Yes
Size	96 x 47 x 33mm
Weight	135g



MT100

SOLENOID TESTER

The MT123 Tests the operating solenoid valves in pneumatic and hydraulic control equipment, plus the test of relays with coils and electrically controlled solenoid valves in all types of vehicles and machineries. Useful for testing solenoid valves when servicing oil burners, the test lamp lights immediately and without metallic contact where there is a magnetic field, e.g. an activated coil in a solenoid valve. The test lamp responds to all kind of magnetic fields from alternating current to direct current and to permanent magnets.

Features

- Easy-to-use
- Detects AC current without metallic contact
- Built-in LED flashlight
- Red LED light with audible beeper indicator
- Test magnetic field (H): 63, 98, 401, 810

Function	Range
Non Contact Magnetic field detector	Yes
Magnetic Field	63, 98, 401, 810
Maximum working current	32mA
Magnetic Detector Visual	Red LED
Flash Light	Yes
Size	158 x 21 x 25mm
Weight	48g



MT123

BATTERY TESTER

The MT235 battery tester measures all kinds of batteries. The user can choose three measurement methods according to the battery shape and read the Voltage on the LCD display. Proper use and care of this tester will provide many years of reliable service.

Features

- Three measurement methods
- Pocket size
- Easy to read LCD display
- Easy to use
- Light weight and portable

Battery Type	Load Current	Minimum Voltage for Good
Button cell 1.5V	50mA	1.125V±0.09V
AAA-N-1.5V	50mA	1.125V±0.09V
AA-C-D-1.5V	150mA	1.125V±0.09V
Lithium 3V	100mA	2.25V±0.18V
6V	10mA	4.5V±0.36V
9V	10mA	6.75V±0.54V
12V	10mA	9V±0.72V
15V	10mA	11.25V±0.9V
22.5V	10mA	16.875±1.35V



MT235

## CONTRACTORS TEST KIT



MTK45

MTKBAG  
Heavy Duty  
Meter Case - Pg 101

Kit Includes:



MT1881  
IP67 Industrial  
Multimeter - Pg 10



K2007R  
1000A AC TRMS  
Clamp Meter - Pg 24



MT310  
ELCB Tester  
- Pg 58



K3005  
Digital Insulation Tester  
- Pg 36



K4118  
Loop/PSC Impedance  
Tester - Pg 50



K4105  
Digital Earth Resistance  
Tester - Pg 48

## CONTRACTORS TEST KIT



MTK35

MTKBAG  
Heavy Duty  
Meter Case - Pg 101

Kit Includes:



MT1881  
IP67 Industrial  
Multimeter - Pg 10



K2007R  
1000A AC TRMS  
Clamp Meter - Pg 24



MT310  
ELCB Tester  
- Pg 58



K3132  
Analogue Insulation  
Tester - Pg 36



K4118  
Loop/PSC Impedance  
Tester - Pg 50



K4105  
Digital Earth Resistance  
Tester - Pg 48

## CONTRACTORS TEST KIT

Kit Includes:



MTK25

MTKBAG  
Heavy Duty  
Meter Case - Pg 101



MT330  
Earth Resistance  
Tester - Pg 48



MT350  
Loop/PSC Impedance  
Tester - Pg 50



MT550  
Digital Insulation Tester  
- Pg 34



MT930  
Phase Rotation Meter  
- Pg 59



MT310  
ELCB Tester  
- Pg 58



MT1877  
IP67 Industrial  
Multimeter - Pg 10



MT720  
400A AC  
Clamp Meter  
- Pg 23

## CONTRACTORS TEST KIT



MTK15

MTKBAG  
Heavy Duty  
Meter Case - Pg 101



MT720  
400A AC  
Clamp Meter  
- Pg 23



MT691  
IR Thermometer  
- Pg 74



MT100  
Continuity & Bell Tester  
- Pg 63



MT150  
50M Laser  
Distance Meter - Pg 91



MT310  
ELCB Tester  
- Pg 58





## THERMAL IMAGERS

### CONTENTS

Thermal Multimeter	66
Professional Thermal Imagers	67
High Performance Thermal Imagers	69
Compact Thermal Imagers	71
Body & Surface Thermal Imager	72

**TRUERMS**



MT2005



File transfer via Bluetooth to free iOS or Android app (phone not included)

## THERMAL MULTIMETER

The MT2005 Professional True RMS Industrial Digital Multimeter with a built-in 80 x 80 pixel Thermal Imager, and TFT colour LCD display, providing fast A/D converting sampling time with high accuracy. This CAT IV meter offers full DMM function ranges of ACV and DCV to 1000V, plus AC+DC Trms Voltage, Micro Amps and Amps, Frequency, Resistance, Capacitance and K-Type Temperature measurements. The 2.8-inch TFT colour display provides a clear thermal image with hot, cold and center spot measurements. It is able to differentiate temperatures between -20°C and 260°C in different colour pallet options, and displays amperage on the thermal screen. The unit offers Bluetooth communication and an internal memory to store and transfer information. The Bluetooth app is available on both Android and IOS platforms for viewing, organizing and sharing recordings. The MT2005 is a fast and easy solution providing maximum versatility and a wide range of features for both trouble shooting and preventative maintenance electricians.

### Features

- 6000 count 2.8" TFT Colour LCD display
- Built-in Thermal imager with MIN/MAX
- Temperature Range -20°C to 260°C
- 50Hz fast Thermal image frame rate
- DC Voltage
- AC, AC+DC TRMS Voltage
- DC current
- AC, AC+DC TRMS current
- Resistance and Continuity test
- Diode test
- Capacitance to 6mF
- Frequency to 10MHz
- Duty Cycle
- Temperature with K-type probe
- Flexible coil current

Function	Range	Accuracy
<b>Imaging and Optical Data</b>		
Field of View	21° x 21°/0.5m	
Spatial resolution (IFOV)	4.53mrad	
Thermal sensitivity/NETD	<0.1°C @ +30°C/100mK	
Image Range	50Hz	
IR Resolution	80 x 80 pixels	
<b>Image Presentation</b>		
Display	2.8" LCD, 240 x 320 pixels	
<b>Measurement</b>		
Temperature range	-20°C to 260°C	±(3°C or ± 3%)
<b>Measurement analysis</b>		
Spot	Center spot	
Automatic detection	Hot or cold markers	
Emmissivity correction	Variable 0.01 to 0.99	
Measurement corrections	Emissivity, reflected temperature	
<b>Communications Interfaces</b>		
<b>Multimeter</b>		
DC Voltage	600.0mV - 1000V	±(0.09% +5)
AC Voltage	600.0mV - 1000V	±(0.8% +5)
AC + DC TRMS Voltage	6.000V - 1000V	±(2.4% +20)
DC Current	600.0µA - 10A	±(0.9% +5)
AC Current	600.0µA - 10A	±(0.12% + 5)
Duty Cycle	5.0% to 95.0%	±(1.2% +2)
Resistance	600.0Ω - 60MΩ	±(0.5% + 5)
Frequency	40.00Hz - 10MHz	±(0.09% +5)
Capacitance	60.00nF - 6mF	±(1.2% + 8)
Temperature	-40 to 600°C	±(1.5% + 3)
Digital Display	6000 count 2.8" TFT	
Input impedance	>10MΩ VDC & >10MΩ VAC	
Size	195 x 88 x 58mm	
Weight	540g	
<b>Optional Accessory</b>		
Flexi Coil AC Current	30.00A - 3000A	±(0.8% + 5)



Built-in Infrared Thermal Imager offers you non invasive measurements of potential hot spots. These images can be transferred via Bluetooth to a Smartphone for analysis. Simply turn on the bluetooth of the smartphone. Press the Thermview+ icon and enter into the home interface, then press the Connect Device icon and the bluetooth device name will appear. Touch the device name listed in Bluetooth devices list to connect to the device.



# THERMAL IMAGER



## 384 x 288 PIXEL THERMAL IMAGER

The MTi60 High-Performance Thermal Imager with a resolution of 384x288 pixel at 50Hz, built-in Laser Distance meter and Wi-Fi ensures that thermal inspections are conducted with greater ease, more effective, and with extreme accuracy. With manual focus, large bright touch screen and easy to access toolbar the user can fine-tune and analyze images quickly and effectively. The touch screen allows the user to manually add up to 3 spot or area measurements, Hot/Cold spot marker that automatically finds the hottest and coldest spots and adjustable zone alarm. It features temperature ranges from -20°C to 650°C, 32X digital zoom, HDMI video output and on-screen adjustable level and span. The hard protective carry case contains a memory card, lithium polymer battery & power supply, and USB cable.

### Features

- 384 x 288 Pixel Thermal Detector
- 110,592 points real temperature
- 50Hz Image Frequency
- Laser Distance 30m
- 3 Area and 2 Line Analysis
- 3 Manual Spots
- Hot, Cold and Centre Spot Temperature
- 3.5" TFT LCD display, Touch Screen
- Instant share & save via WiFi to PC, iOS and Android smart devices
- Colour Pallets include Iron, Rainbow, Grey, Grey Inverted, Brown, Blue/Red, Feather, Zone Alarm
- Rugged and industrial design casing
- Easy to use functions via touch screen

Function	Range
<b>Imaging and Optical Data</b>	
Field Of View	17° x 12.7°
Spatial Resolution	0.77mrad
Thermal Sensitivity	<0.08" at 30°C (86°F)/80mK
Image Frequency	50Hz
<b>Focus Mode Manual</b>	
Focus Mode	Manual Focus
Focal Length	22mm
Focal Plane Array (FPA)/Spectral Range	Uncooled Microbolometer/8-14µm
IR Resolution	384 x 288 pixels
<b>Image Presentation</b>	
Display	3.5" TFT LCD, Touch Screen
Display Resolution	640 x 480 pixels
Image Modes	IR Image, Visual Image, Pic-in-Pic, Auto Fusion
Colour Pallets	Iron, Rainbow, Grey, Grey Inverted, Brown, Blue/Red, Feather, Zone Alarm
<b>Measurements</b>	
Object Temperature Range	-20 to 150°C (-4 to 302°F) / 0 to 650°C (32 to 1202°F)
Object Temperature Accuracy	±2°C (3.6°F) or ±2% of reading
Laser Distance	0.05 to 30m (0.15 to 98ft)
Laser Distance Accuracy	Typically ±1.5mm (0.06in)
<b>Measurement Analysis</b>	
Spot	Centre Spot & 3 Manual spots
Automatic	Auto Hot & Cold markers
Line	2 lines analyse
Area	3 areas analyse
Adjustable Emissivity	0.01 to 1.0
Measurement Correction	Emissivity, Reflected Temperature, Ambient Temperature, Humidity, Infrared Compensation, Distance Compensation
<b>Storage</b>	
Storage Media	8GB Micro SD Card, 3.4GB Internal EMMC
Video Storage Mode	Standard MPEG-4
Image Storage Mode	JPEG and HIR and simultaneous visual image including measurement data
<b>Data Communication Interfaces</b>	
Interfaces	USB-Mini, HDMI
Video Out	HDMI
Wi-Fi	802.11, transfer images and real time video stream
Size	260 x 101 x 120mm
Weight	846g



MTi60



File transfer via Wi-Fi to free iOS or Android app (phone not included)



MTi50

## 160 X 120 PIXEL THERMAL IMAGER

The MTi50 Thermal Imager with a resolution of 160 x 120 pixel at 50Hz, built-in Laser Distance meter and Wi-Fi is ideal for predictive maintenance, equipment troubleshooting and verification. Quickly and effectively detects anomalies on drive motors, electrical panels or HVAC applications with manual focus, large bright touch screen and easy to access toolbar. The touch screen allows the user to manually add up to 3 spot or area measurements, Hot/Cold spot marker that automatically finds the hottest and coldest spots and adjustable zone alarm. It features temperature ranges from -20°C to 650°C, 32X digital zoom, HDMI video output and on-screen adjustable level and span. The hard protective carry case contains a memory card, lithium polymer battery & power supply, and USB cable.

### Features

- 160 x 120 Pixel Thermal Detector
- 19,200 points real temperature
- 50Hz Image Frequency
- Laser Distance 30m
- 3 Area and 2 Line Analysis
- 3 Manual Spots
- Hot, Cold and Centre Spot Temperature
- 3.5" TFT LCD display, Touch Screen
- Instant share & save via Wi-Fi to PC, iOS and Android smart devices
- Colour Palettes include Iron, Rainbow, Grey, Grey Inverted, Brown, Blue/Red, Feather, Zone Alarm
- Rugged and industrial design casing
- Easy to use functions via touch screen

Function	Range
<b>Imaging and Optical Data</b>	
Field Of View	17° x 12.7°
Spatial Resolution	1.89mrad
Thermal Sensitivity	<0.05° at 30°C (86°F)/50mK
Image Frequency	50Hz
<b>Focus Mode Manual</b>	
Focus Mode	Manual Focus
Focal Length	9mm
Focal Plane Array (FPA)/Spectral Range	Uncooled Microbolometer/8-14µm
IR Resolution	160 x 120 pixels
<b>Image Presentation</b>	
Display	3.5" TFT LCD, Touch Screen
Display Resolution	640 x 480 pixels
Image Modes	IR Image, Visual Image, Pic-in-Pic, Auto Fusion
Colour Palettes	Iron, Rainbow, Grey, Grey Inverted, Brown, Blue/Red, Feather, Zone Alarm
<b>Measurements</b>	
Object Temperature Range	-20 to 150°C (-4 to 302°F) / 0 to 650°C (32 to 1202°F)
Object Temperature Accuracy	±2°C (3.6°F) or ±2% of reading
Laser Distance	0.05 to 30m (0.15 to 98ft)
Laser Distance Accuracy	Typically ±1.5mm (0.06in)
<b>Measurement Analysis</b>	
Spot	Centre Spot & 3 Manual Spots
Line	2 Line Analysis
Area	3 Line Analysis
Automatic	Auto Hot & Cold Markers
Adjustable Emissivity	0.01 to 1.0
Measurement Correction	Emissivity, Reflected Temperature, Ambient Temperature, Humidity, Infrared Compensation, Distance Compensation
<b>Storage</b>	
Storage Media	8GB Micro SD Card, 3.4GB Internal EMMC
Video Storage Mode	Standard MPEG-4
Image Storage Mode	JPEG and HIR and simultaneous visual image including measurement data
<b>Data Communication Interfaces</b>	
Interfaces	USB-Mini, HDMI
Video Out	HDMI
Wi-Fi	802.11, transfer images and real time video stream
Size	260 x 101 x 120mm
Weight	846g



File transfer via Wi-Fi to free iOS or Android app (phone not included)





# THERMAL IMAGER



## 160 x 120 PIXEL THERMAL IMAGER

For clear and accurate thermal analysis of electrical panels, motors, compressor lines and HVAC applications, the Wi-Fi enabled MTi15 Thermal Imager allows the user to transfer images and stream live video to PC or a smart device. With a 160 x 120 pixel resolution at 50Hz, touch screen and manual focus, this lightweight thermal imager offers real-time detection of thermal issues effectively and is ideal for plant and maintenance electricians as well as HVAC installers. The unit has a temperature range from -20°C to 650°C, 16X digital zoom, picture-in-picture, thermal fusion, 3 Hot/Cold spot marker, 3 Area and 2 line analysis options that are available on the 3.5" touch screen from which data can be easily transferred.

### Features

- 160 x 120 Pixel Thermal Detector
- 19,200 points real temperature
- 50Hz Image Frequency
- 3 Area and 2 Line Analysis
- 3 Manual Spots
- Hot, Cold and Centre Spot Temperature
- 3.5" TFT LCD display, Touch Screen
- Instant share & save via WiFi to PC, iOS and Android smart devices
- Colour Palettes include Iron, Rainbow, Grey, Grey Inverted, Brown, Blue/Red, Feather, Zone Alarm
- Rugged and industrial design casing
- Easy to use functions via touch screen

Function	Range
<b>Imaging and Optical Data</b>	
Field Of View	20.7° x 15.6°
Spatial Resolution	1.88mrad
Thermal Sensitivity	<0.05° at 30°C (86°F)/50mK
Image Frequency	50Hz
<b>Focus Mode Manual</b>	
Focus Mode	Manual Focus
Focal Length	7.5mm
Focal Plane Array (FPA)/Spectral Range	Uncooled Microbolometer/8-14µm
IR Resolution	160 x 120 pixels
<b>Image Presentation</b>	
Display	3.5" TFT LCD, Touch Screen
Display Resolution	640 x 480 pixels
Image Modes	IR Image, Visual Image, Pic-in-Pic, Auto Fusion
Colour Palettes	Iron, Rainbow, Grey, Grey Inverted, Brown, Blue/Red, Feather, Zone Alarm
<b>Measurements</b>	
Object Temperature Range	-20 to 150°C (-4 to 302°F) / 0 to 650°C (32 to 1202°F)
Object Temperature Accuracy	±2°C (3.6°F) or ±2% of reading
<b>Measurement Analysis</b>	
Spot	Centre Spot & 3 Manual Spots
Automatic	Auto Hot & Cold Markers
	2 Line Analysis
	3 Area Analysis
Adjustable Emissivity	0.01 to 1.0
Measurement Correction	Emissivity, Reflected Temperature
<b>Storage</b>	
Storage Media	8GB Micro SD Card, 3.4GB Internal EMMC
Video Storage Mode	Standard MPEG-4
Image Storage Mode	Bitmap (.bmp) and simultaneous visual image including measurement data
<b>Data Communication Interfaces</b>	
USB Type	C, Data and Live Video transfer to PC
WiFi	802.11 Data and Live Video transfer to App
Size	224 x 77 x 96mm
Weight	500g



MTi15



File transfer via Wi-Fi to free iOS or Android app (phone not included)

## 80 x 80 PIXELS THERMAL IMAGER

Detecting a hot connection in a distribution board has never been this easy. The MTi13 is focus free and has a large touch screen that makes detecting and analyzing hot spots quick and easy. This lightweight thermal imager with 80x80 pixel resolution at 50Hz offers real-time detection of hot spots ideal for maintenance electricians. The Wi-Fi functionality allows the user to transfer live thermal information to a smart device for analysis. It features adjustable emissivity, temperature ranges from -20°C to 650°C, 3 moveable spots and area temperatures, centre spot, automatic Hot and Cold spot markers; and line measurement. The instrument comes supplied in a hard carry case and includes a charging base, microSD card and Type-C data cable.

### Features

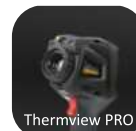
- 80x80 Pixel Thermal Detector
- 6,400 points real temperature
- 50Hz Image Frequency
- Hot, Cold and Centre Spot Temperature
- 3 Area and 2 Line Analysis
- 3 Manual Spots
- Hot, Cold and Centre Spot Temperature
- 3.5" TFT LCD display, Touch Screen
- Instant share & save via WiFi to PC, iOS and Android smart devices
- Colour Pallets include Iron, Rainbow, Grey, Grey Inverted, Brown, Blue/Red, Feather, Zone Alarm
- Rugged and industrial design casing
- Easy to use functions

Function	Range
<b>Imaging and Optical Data</b>	
Field Of View	21° x 21°
Spatial Resolution	4.53mrad
Thermal Sensitivity	<0.1° at 30°C (80°F)/100mK
Image Frequency	50Hz
<b>Focus Mode Manual</b>	
Focus Mode	Focus Free
Focal Length	7.5mm
Focal Plane Array (FPA)/Spectral Range	Uncooled Microbolometer/8-14µm
IR Resolution	80 x 80 pixels
<b>Image Presentation</b>	
Display	3.5" colour TFT LCD, Touch Screen
Display Resolution	640 x 480 pixels
Image Modes	IR Image, Visual, Pic-in-pic, Thermal Fusion, Zone Alarm
Colour Pallets	Iron, Rainbow, Grey, Grey Inverted, Brown, Blue/Red, Feather
<b>Measurements</b>	
Object Temperature Range	-20 to 650°C (-4 to 1202°F)
Object Temperature Accuracy	±2°C (3.6°F) or ±2% of reading
<b>Measurement Analysis</b>	
Spot	Centre Spot, 3 Manual Spots
Automatic	Automatic Hot/Cold Detection
Line	2 Line Analysis
Area	3 Area Analysis
Adjustable Emissivity	0.01 to 1.0
Measurement Correction	Emissivity, Reflected Temperature, Ambient, Temperature, Humidity, Infrared Compensation, Distance Compensation
<b>Storage</b>	
Storage Media	8GB Micro SD Card, 3.4GB Internal EMMC
Video Storage Mode	Standard MPEG-4
Image Storage Mode	JPEG and HIR and simultaneous visual image including measurement data
<b>Data Communication Interfaces</b>	
Interfaces	Type-C
Wi-Fi	802.11, transfer images and real time video stream
Size	224 x 77 x 96mm
Weight	500g

MTi13



File transfer via Wi-Fi to free iOS or Android app (phone not included)



## 80 x 80 PIXELS THERMAL IMAGER

For quick and accurate thermal diagnostics, the MTi11 is a must have for every electrician. With an 80x80 pixel 50Hz thermal detector, this compact thermal camera is ideal for beginners. It is focus free and makes detecting hot spots quick and easy. The Bluetooth functionality allows the user to transfer thermal information to a smart device while still in the plant and a PDF report can be sent via email immediately eliminating costly downtime. It features adjustable emissivity, temperature ranges from -20°C to 380°C, centre spot temperature as well as Hot and Cold spot markers.

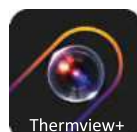
### Features

- 80 x 80 Pixel Thermal Detector
- 6,400 points real temperature
- 50Hz Image Frequency
- Hot, Cold and Centre Spot Temperature
- 2" bright graphical TFT display, 240x320 pixel
- Instant share & save via Bluetooth to iOS and Android smart devices
- Colour Palettes include Iron, Rainbow, Rainbow HC, Grey and Grey Inverted
- Rugged and industrial design casing
- Easy to use functions

Function	Range
<b>Imaging and Optical Data</b>	
Field Of View	21° x 21°
Spatial Resolution	4.53mrad
Thermal Sensitivity	<0.1° at 30°C (86°F)/100mK
Image Frequency	50Hz
<b>Focus Mode Manual</b>	
Focus Mode	Focus Free
Focal Length	7.5mm
Focal Plane Array (FPA)/Spectral Range	Uncooled Microbolometer/8-14µm
IR Resolution	80 x 80 pixels
<b>Image Presentation</b>	
Display	2" colour TFT LCD
Display Resolution	240 x 320 pixels
Image Modes	IR Image
Colour Palettes	Iron, Rainbow, Rainbow HC, Grey, Grey Inverted
<b>Measurements</b>	
Object Temperature Range	-20 to 380°C (-4 to 716°F)
Object Temperature Accuracy	±2°C (3.6°F) or ±2% of reading
<b>Measurement Analysis</b>	
Spot	Centre Spot & 3 Manual Spots
Automatic	Auto Hot & Cold Markers
Adjustable Emissivity	0.01 to 1.0
Measurement Correction	Emissivity, Reflected Temperature
<b>Storage</b>	
Image Storage Mode	Bitmap (.bmp) including measurement data
<b>Data Communication Interfaces</b>	
USB	Micro
Bluetooth	BLE 4.0
Size	175 x 58 x 70mm
Weight	450g



MTi11



File transfer via Bluetooth to free iOS or Android app (phone not included)





MTiB12

## BODY & SURFACE THERMAL IMAGER

The MTiB12 Body & Surface Thermal Imager is a handheld thermal imaging camera used for measuring body temperature and can also be used for predictive maintenance, equipment troubleshooting and verification. The MTiB12 features a 20mS sampling rate and is ideal for scanning multiple targets. The adjustable High alarm makes it easy to instantly identify a person in a group that has an above average temperature. Thermal images are displayed on the LCD display and can be saved on the internal memory. With Bluetooth and an instant share function, the thermal images can be transferred to one's smart phone to analyze, share and perform quick reporting.

### Features

- 80 x 80 pixel thermal imaging system
- 6400 points real temperature fast measurements
- Screening Temperature mode 32 to 42°C
- Measuring Accuracy:  $\pm 0.5^{\circ}\text{C}$
- Thermal sensitivity:  $<0.1^{\circ}\text{C}$  |  $300^{\circ}\text{C}$  /  $100\text{mK}$
- 50Hz fast Thermal image frame rate
- Hot, Cold, Centre three temperature tracking function
- Large, easy-to-read, bright graphical TFT display
- Bluetooth image instant share & save with iOS and Android smart device
- Scene temperature range Lock function.
- With LED flashlight function
- Long running time up to 8 hours with rechargeable battery
- Smart and compact design
- Rugged industrial design

Function	Range
<b>Imaging and Optical Data</b>	
Field of View	$21^{\circ} \times 21^{\circ}$
Spatial resolution (IFOV)	$4.53\text{mrad}$
Thermal Sensitivity/NETD	$<0.1^{\circ}\text{C}$ @ $+30^{\circ}\text{C}$ / $100\text{mK}$ 10.12:1
Image range	50Hz
<b>Focus mode Manual</b>	
Focus Mode	Focus Free
Focal length	7.5mm
Focal Plane Array (FPA)/Spectral range	Uncooled microbolometer / $8\text{-}14\mu\text{m}$
IR Resolution	$80 \times 80$ pixels
<b>Image Presentation</b>	
Display	22 colour TFT LCD, $240 \times 320$ pixels
Image Modes	IR Image
Colour Palettes	Iron, Rainbow, Grey, Grey Inverted, Rainbow high contrast
<b>Measurement</b>	
Temperature Range	$-20^{\circ}\text{C}$ to $+380^{\circ}\text{C}$ $\pm(2.0\% + 2^{\circ}\text{C})$
Body Temperature Range	$+32^{\circ}\text{C}$ to $+42^{\circ}\text{C}$ $\pm 0.5^{\circ}\text{C}$
<b>Storage</b>	
Images Format	Bitmap (BMP) including measurement data
Size	$175 \times 58 \times 70\text{mm}$
Weight	450g



File transfer via Bluetooth to free iOS or Android app (phone not included)



# THERMOMETERS

## CONTENTS

Infrared Thermometers	74
Non-Contact Body IR Thermometer	74
K/J-Type Thermometers	75
Pocket Thermometers	75
Thermometer Kits	76
K-Type Temperature Data Logger	76
Temperature Probes	77





MT694

## 1000°C INFRARED THERMOMETER

The MT694 is a small and compact pistol grip type infrared thermometer which can provide fast and accurate readings for most surface temperature measurements due to its sampling rate of 150 milliseconds. The distance to spot ratio is 20:1 and the temperature range is from -50°C to 1000°C. This meter features a multipoint laser which increases the target accuracy when the unit is at the optimum distance from the object being measured. Special features include adjustable emissivity from 0.1 to 1.0, external Type-K temperature measurements, response time 150ms, max hold, large backlit LCD display, High and Low alarm and a trigger lock for continuous use.

### Features

- Spot Ratio 20:1
- Temperature -50°C to +1000°C
- Response time 150ms
- Adjustable emissivity from 0.10 to 1.0
- Circular laser sighting
- Selectable °C or °F
- Automatic Data Hold
- MIN, MAX, AVG and DIF temperature displays
- Set High and Low alarms
- Type-K input
- Automatic selection range and Display Resolution
- Backlit LCD display
- 2 meter drop tested
- IP54 Splash Proof & Dust Resistant
- Auto Power Off

Function	Range	Accuracy
Infrared Temperature range	-50°C to +1000°C	±(1.0% +1°C)
Resolution	0.1°C	
Distance Spot Ratio	20:1	
Response Time	150ms	
Emissivity	0.10 to 1.0	
Type-K Temperature range	-50°C to +1370°C	±(0.5% +1.5°C)
Resolution	0.1°C 0.1°F	
MIN/MAX/AVG/DIF Display	Yes	
Hi/Lo Alarm	Yes	
Overrange Indication	Yes	
Size	170 x 50 x 85mm	
Weight	248g	



MT691

## 650°C INFRARED THERMOMETER

The MT691 is a professional dual laser infrared thermometer that is small and compact with a pistol grip and has a super fast sampling rate of 150 milliseconds. The distance to spot ratio is 12:1, and the temperature range is from -50°C to 650°C. This dual laser infrared thermometer meter features two laser pointers which converges into a single spot when the unit is at the optimum distance from the object being measured. Special features include adjustable emissivity from 0.1 to 1.0, max hold, response time 150ms, large backlit LCD display, High and Low alarm and a trigger lock for continuous use.

### Features

- Spot Ratio 12:1
- Temperature -50°C to +650°C
- Response time 150ms
- Adjustable emissivity from 0.10 to 1.0
- Dual laser sighting
- Selectable °C or °F
- Automatic Data Hold
- MIN, MAX, AVG and DIF temperature displays
- Set High and Low alarms
- Automatic selection range and Display Resolution
- Backlit LCD display
- 2 meter drop tested
- IP54 Splash Proof & Dust Resistant
- Auto Power Off

Function	Range	Accuracy
Infrared Temperature range	-50°C to +650°C	±(1.0% +1°C)
Resolution	0.1°C	
Distance Spot Ratio	12:1	
Response Time	150ms	
Emissivity	0.10 to 1.0	
MIN/MAX/AVG/DIF Display	Yes	
Hi/Lo Alarm	Yes	
Overrange Indication	Yes	
Size	170 x 50 x 85mm	
Weight	238g	



MT688

## BODY INFRARED THERMOMETER

The MT688 is a professional body infrared thermometer is designed for body surface and forehead temperature measurement for infants and adults without contact with the human body. It can also be used to measure temperature of baby bottles, bath water or room temperature. This small and compact IR thermometer with a pistol grip offers accurate readings for body temperature from 32°C to 42.5°C, while in surface mode the temperature range is 0°C to 60°C. The operating distance range is from 1cm to 10cm, and 32 measurements can be memorized all displayed on the large backlit LCD display. The MT688 has an automatic data hold function as well as auto power off mode after several seconds that extends the battery life. Complies to IEC 60601-1 and IEC 60601-1-2 medical electrical equipment.

### Features

- Measurement range 1cm to 10cm
- Body Temperature 32°C to 42.5°C
- Surface Temperature 0°C to 60°C
- Set Alarm value
- Memorize last 32 measurements
- Selectable °C or °F
- Automatic Data Hold
- Resolution 0.1°C
- Backlit LCD display
- Auto Power Off

Function	Range	Accuracy
Body Temperature range	32°C to 42.5°C	±0.2°C
Surface Temperature range	0°C to 60°C	±0.2°C
Resolution	0.1°C	
Distance Spot Ratio	1cm to 10cm	
Response Time	< 1 seconds	
Overrange Indication	Yes	
Size	131 x 82 x 35mm	
Weight	130g	



# THERMOMETERS



## DUAL INPUT THERMOMETER

The MT632 is a dual input K-Type general purpose thermometer with a wide measuring range from K-type -200°C to +1372°C and J- type -210°C to +1100°C with a selectable resolution of 0.1°C or 1°C that offers fast response and laboratory accuracy. The MT632 displays a number of temperature readings such as T1, T2, T1-T2 plus MAX, MIN, AVG. The MT632 features include a relative time clock on MAX, MIN and AVG and provides a time reference for major events. This thermometer works with K & J thermocouples and offers 0.1°C resolution.

### Features

- Dual K-Type inputs
- Max / Min / Average
- K-type -200°C to 1372°C
- J-type -210°C to 1100°C
- Resolution 0.1°C / 1°C
- Selectable units of °C, °F, K
- Data Hold
- Relative Time Clock on Max / Min / Average
- Electronic Offset function

Function	Range	Accuracy
Temperature Ranges	°C, °F or Kelvin (K)	
K-Type	-200°C to 1372°C	
K-Type resolution	0.1°C	±(0.15%+1°C)
J-Type	-210°C to 1100°C	
J-Type resolution	0.1°C	±(0.15%+1°C)
Channels	Two	
Min Max Ave	Yes	
Data Hold	Yes	
Back Light	Yes	
Size	146 x 104 x 43 mm	
Weight	163g	



MT632

## SINGLE INPUT THERMOMETER

The MT630 is a single input J/K-type general purpose thermometer with a wide measuring range from K-type -200°C to +1372°C and J- type -210°C to +1100°C with a selectable resolution of 0.1°C or 1°C that offers fast response and laboratory accuracy. The MT630 displays a number of temperature readings such as T1 plus MAX, MIN and AVG. Features include a relative time clock on MAX, MIN and AVG and provides a time reference for major events. Electronic offset function which allows compensation of thermocouple errors to maximise overall accuracy.

### Features

- Single K-Type input
- Max / Min / AVG
- K-type -200°C to 1372°C
- J-type -210°C to 1100°C
- Resolution 0.1°C / 1°C
- Selectable units of °C, °F, K
- Data Hold
- Relative Time Clock on Max / Min / Average
- Electronic Offset function

Function	Range	Accuracy
Temperature Ranges	°C, °F or Kelvin (K)	
K-Type	-200°C to 1372°C	
K-Type resolution	0.1°C	±(0.15%+1°C)
J-Type	-210°C to 1100°C	
J-Type resolution	0.1°C	±(0.15%+1°C)
Min Max Ave	Yes	
Channels	One	
Data Hold	Yes	
Back Light	Yes	
Size	160 x 58 x 27mm	
Weight	200g	



MT630

## POCKET THERMOMETER

The MT600 is a pocket size digital thermometer ideal for the air conditioning and HVAC industry. The meter comes with a 65mm stainless steel integral probe that can accurately measure air and liquid temperatures, and the Min/Max function records the minimum and maximum temperatures over a period of time.

### Features

- Compact pocket size with carrying case
- Temperature -50°C to 200°C / Accuracy ±2°C / 0.1°C Resolution
- 65mm Stainless steel sensor probe
- Measurement rate: 1 time per second
- High and low alarms; Min/Max record mode; Low battery indication
- 3½ digital LCD display

Function	Range	Accuracy
Temperature	-50°C to 200°C	
Temperature resolution	0.1°C	±2°C
Min Max Ave	Yes	
Channels	Single fixed probe	
Temperature Ranges	°C or °F	
Size	112 x 65 x 14mm	
Weight	35g	



MT600

## PEN-TYPE THERMOMETER

The pen type MT605 thermometer with its quick response has a temperature range of -40° to 250°C. Other features include a 115mm integral probe, a Min/Max record of temperature over a period of time, Data Hold button, and is able to withstand a 2m drop. The MT605 is supplied with a protective rubber holster.

### Features

- -40° to 250°C
- 0.1°C Resolution
- Data Hold
- Min / Max
- Selectable °C or °F

Function	Range	Accuracy
Temperature	-40°C to 250°C	
Temperature resolution	0.1°C	±(1.5%+2°C)
Channels	Single fixed probe	
Temperature Ranges	°C or °F	
Size	112 x 65 x 14mm	
Weight	35g	



MT605



MT652  
MT650

## THERMOMETER KITS

The MT652 temperature kit is ideal for the professional who requires differential temperature measurement, the MT632 uses K-Type and J-Type probes has a temperature range -200°C to 1372°C. The MT690 is a unique temperature probe set where each of the probe sensors fit into the standard handle. Supplied in a hard durable plastic case this kit can be taken into many harsh environments.

### MT652 Kit Includes:

- MT632 - Dual Input Digital Thermometer
- MT660 - General Purpose Bead Probe
- MT690 - Probe kit consisting of: Surface Probe, Air Probe, General Purpose Probe
- MT651 - Carrying Case

## THERMOMETER KITS

The MT650 temperature kit is ideal for the factories, offices, or any site where different types of areas need temperature measurement, the MT630 is a single input meter and uses K-Type and J-Type probes has a temperature range -200°C to 1372°C. The MT690 is a unique temperature probe set where each of the probe sensors fit into the standard handle. Supplied in a hard durable plastic case this kit can be taken into many harsh environments.

### MT650 Kit Includes:

- MT630 - Single Input Digital Thermometer
- MT660 - General Purpose Bead Probe
- MT690 - Probe kit consisting of: Surface Probe, Air Probe, General Purpose Probe
- MT651 - Carrying Case

## K-TYPE DATA LOGGER



MT643

The MT643 is a standalone temperature data logger and measures and stores over 32,000 temperature readings from -200°C to +1370°C. With its precision calibrated internal temperature sensor, all the user has to do is place the logger in the field and leave it until the desired information has been recorded. The user can easily set up the logger and view downloaded data for analysis by plugging the data logger into a PC's USB port and using the free software. Displays all status information through two LED's, and where user defined minimum/maximum values are exceeded, and alarm LED will flash. Selectable measuring cycles can be set up from 1 second to 12 hours.

### Features

- K-Type -200° to 1370°C
- 31 808 Data storage points
- Battery life: more than 3 years
- USB interface
- Alarm display
- Software
- Selectable measuring cycle: 1s, 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr

Function	Range	Accuracy
K-Type	-200°C to 1370°C	±(1%)
K-Type resolution	0.1°C	
Data logging	31808 Readings	
Sample Rate	1s, 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr	
Channels	Single	
Temperature Ranges	°C, °F	
Size	101 x 24 x 21.5mm	
Weight	172g	

# TEMPERATURE PROBES



## TEMPERATURE PROBE KIT

The MT690 complete probe kit consists of a handle which uses interchangeable surface, air and general purpose probes. This is a low cost but effective thermometer probe kit. Fits all Major Tech type-K digital thermometers including Major Tech DMM's.

### Features

- Complete probe kit consists of a handle which uses interchangeable surface, air and general purpose probes
- Low cost and effective thermometer probe kit



## LIQUID TEMPERATURE PROBE

The MT685 Liquid Temperature Probe can be used on all Major Tech type-K digital thermometers including Major Tech DMM's. Range from -50°C to 649°C. Very strong for liquids, semi-solids, air and granular material.

### Features

- Range -50°C to 649°C
- Very strong for liquids, semi-solids, air and granular material



## AIR TEMPERATURE PROBE

The MT680 Air Temperature Probe can be used on all Major Tech type-K digital thermometers including Major Tech DMM's. Range from -50°C up to 300°C. Extremely fast response for gas and air temperatures for refrigeration, heating and ventilating engineers.

### Features

- Range -50°C up to 300°C
- Extremely fast response for gas and air temperatures
- Ideal for refrigeration, heating and ventilating engineers

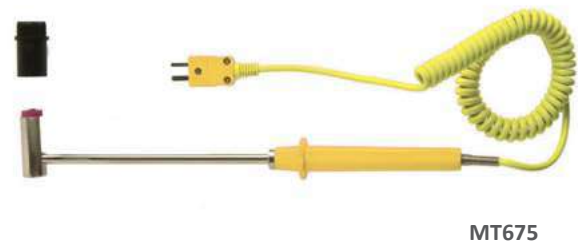


## SURFACE TEMPERATURE PROBE

The MT675 is right angled Surface Probe and can be utilised with Major Tech type-K digital thermometers including the Major Tech DMM's. Range from -50°C up to 500°C. Ideal for areas where minimal space is available.

### Features

- Range -50°C up to 500°C
- Right Angled Probe
- Quick response for surface temperature measurement
- Ideal for refrigeration, heating and ventilating engineers

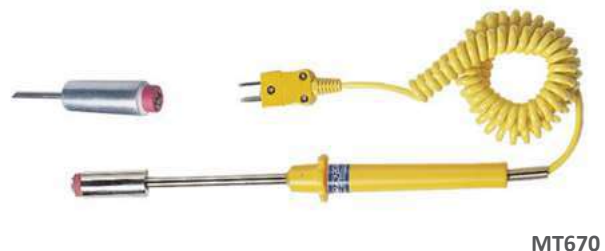


## SURFACE TEMPERATURE PROBE

The MT670 Surface Probe can be utilised with Major Tech type-K digital thermometers including Major Tech DMM's. Range from -50°C up to 500°C. Very fast response for surface temperature measurement for sheet metal, radiators, photocopier, rollers, etc.

### Features

- Range -50°C - 500°C
- Straight Probe
- Quick response for surface temperature measurement
- Ideal for sheet metal, radiators, photocopier and rollers



## GENERAL PURPOSE TEMPERATURE PROBE

The MT660 General Purpose Probe can be used on all Major Tech type-K digital thermometers including Major Tech DMM's. Range from -30°C up to 250°C. Exposed thermocouple with PTFE Insulation for general purpose use in heating and refrigeration industries, including radiator fan, water and air temperatures.

### Features

- Range -30°C - 250°C
- Exposed thermocouple with PTFE Insulation
- General purpose use in heating and refrigeration industries
- Ideal for radiator fans, water and air temperatures







## ENVIRONMENTAL METERS

### CONTENTS

Anemometers	79
Lux Meters	80
Video Borescope	80
Thermo-Hygrometer	81
Temperature/Humidity Data Logger	81
Particle Counters	82
Temperature Humidity Meter	82
Multifunction Environment Meters	83
Sound Level Meter	84
Leak Detectors	85
Carbon Monoxide Monitor	85

# ANEMOMETERS



## THERMO ANEMOMETER



The MT948 is an accurate Thermo-Anemometer that measures Air Velocity, Air Flow and Temperature. The meter is capable of measuring CMM (cubic meters/minute) or CFM (cubic feet/minute) by simply entering the area of the air source and can store 8 memory locations for both CMM and CFM for the most commonly used area sizes that the user can recall at anytime.

The remote vane has a built-in temperature sensor, which simultaneously displays the wind speed and temperature on the large easy to read backlit LCD. The MT948 is ideal for monitoring commercial and domestic air conditioning systems. The MT948 is useful as the sensor can be held in the duct and the operator can read the measurements.

### Features

- Simultaneously displays air flow/air velocity plus ambient temperature
- CMM air flow from 0.001 to 999900m<sup>3</sup>/min (area)
- CFM air flow from 0.001 to 999900ft<sup>3</sup>/min (area)
- Temperature -10°C to 60°C
- Resolution 0.01m/s
- 20 Points average for air flow
- 16 Memory locations for commonly used area sizes
- Wind speed measure in mph, ft/min, km/h, m/s or knots
- Min / Max

Function	Range	Accuracy
Air velocity m/s	0.40 to 30.00 m/s	±(3%+0.20 m/s)
Air velocity ft/min	80 to 5900 ft/min	±(3%+40 ft/min)
Air velocity km/h	1.4 to 108.0 km/h	±(3%+0.8 km/hr)
Air velocity MPH	0.9 to 67.0 mph	±(3%+0.4 mph)
Air velocity knots	0.8 to 58.0 knots	±(3%+0.4 knots)
Air temperature	-10°C to 60°C	
Air temperature resolution	0.1°C	±2.0°C
Air flow Cubic m/min	0 to 999900 m <sup>3</sup> /min	
Air flow Cubic m/min resolution	0.001 to 100	area 0.000 to 999.9m <sup>2</sup>
Air flow Cubic ft/min	1 to 999900ft <sup>3</sup> /min	
Air flow Cubic ft/min resolution	0.001 to 101	area 0.000 to 999.9ft <sup>2</sup>
Size	203 x 75 x 50mm, sensor head Ø70mm	
Weight	725g	



MT948

## HOT WIRE ANEMOMETER

The MT945 is a microprocessor designed for low air velocity and the slim probe makes it ideal for grilles and diffuses. The combination of hot wire and standard thermistor, delivers rapid and precise measurements even at low velocity values. The Telescopic probe is ideal for measuring HVAC ducts and other small vents.

### Features

- Thermal anemometer, for low air velocity measurement
- Combination of hot wire and standard thermistor deliver rapid, precise measurements
- Temperature 0°C to 50°C
- Min / Max
- Displays air velocity and temperature simultaneously
- Air flow measure in mph, ft/min, km/h, m/s or knots
- Data Hold

Function	Range	Accuracy
Air velocity m/s	0.1 to 25.0 m/s	±(5%+1) or ±(1%+1) full scale
Air velocity ft/min	20 to 4925 ft/min	±(5%+1) or ±(1%+1) full scale
Air velocity km/h	0.3 to 90.0 km/h	±(5%+1) or ±(1%+1) full scale
Air velocity MPH	0.2 to 55.8 mph	±(5%+1) or ±(1%+1) full scale
Air velocity knots	0.2 to 48.5 knots	±(5%+1) or ±(1%+1) full scale
Air temperature	0°C to 50°C	
Air temperature resolution	0.1°C	±(1.0°C)
Air velocity m/s resolution	0.01m/s	
Size	210 x 75 x 50mm	
Weight	280g	



MT945

## MINI ANEMOMETER



The MT90 is a mini anemometer professionally designed to ensure comfort in the hand and with a modern look. Selectable windspeed units are m/s, km/h, ft/min, MPH, Knots, perfect when measuring air velocity in various environments. The large backlit display indicates the air velocity readings together with the temperature measured. Other features include Min/Max recording, Data Hold function and Bluetooth. The Bluetooth function allows the user to transmit data to the Android or iOS mobile App for viewing, organizing and sharing recordings.

### Features

- Dual Line 4 Digit LCD Display
- Air velocity in m/s, km/h, ft/min, mph, knots
- Measures air temperature
- Bluetooth BLE
- Auto power off

Function	Range	Accuracy
Air velocity m/s	1.10 - 25 m/s	
Air velocity m/s resolution	0.01m/s	±(3% + 0.30m/s)
Air velocity km/h	4.0 - 90.0 km/h	±(3% + 1.0km/hr)
Air velocity ft/min	220 - 4920 ft/min	±(3% + 40ft/min)
Air velocity mph	2.5 - 56.0 mph	±(3% + 0.4mph)
Air velocity knots	2.2 - 48.0 knots	±(3% + 0.4knots)
Air Temperature	0°C to 60°C	±(2.0°C)
Data Transfer	Bluetooth	
Size	213 x 54 x 36mm	
Weight	172g	



MT90





MT943

## LUX METER

The MT943 is a professional light meter providing quick light readings in Foot Candles or Lux up to 400,000 Lux. The meter has special relative efficiency and has a correction factor for non-standard light sources, thus eliminating the need for manual calculations. The Peak Hold function captures the readings within 10 micro seconds and displays either the minimum peak or maximum peak. The MT943 has data logging capabilities and can link up to a computer whereby the information is downloaded via the USB interface, a software CD and USB cable is included. Other features include the Min and Max record, a large LCD display with a quick bargraph and backlight.

### Features

- Professional light meter providing quick light readings in Lux
- LCD display with 4 segment bargraph
- Measures to 400 000 Lux
- 4 Measuring ranges
- Peak Hold
- Relative mode
- Min / Max
- Data Hold
- Short rise and fall time
- Data logging up to 99 Readings
- USB Interface



Function	Range	Accuracy
Function	400.0 to 400 000 Lux	$\pm(3\% \pm 0.5\%f.s.)$
Sample Rate	1.3 times/sec	
Spectral Response	CIE Photopic (human eye response Curve)	
Photo Detector	One Silicon photo diode and spectral response filter	
Cosine Response Accuracy		$f2' \leq \%$
Size	<b>Meter</b> 170 x 80 x 40mm <b>Photo Detector</b> 115 x 60 x 20mm	
Weight	390g	



MT942

## LED LUX METER

The MT942 measures light from visible luminaries equipped with white light LED fluorescent, metal halide, high-pressure sodium and incandescent sources. The MT942 is ideal for using in warehouses, factories, office buildings, restaurants, schools, hospitals, art galleries, photographic studios and stadiums.

### Features

- Professional light meter providing quick light readings in Lux
- 4000 Count LCD display
- Measures to 400 000 Lux
- 4 Measuring ranges
- Peak Hold
- Relative mode
- Min / Max
- Data Hold
- Short rise and fall time
- Data logging up to 99 Readings

Function	Range
Range	40 to 400 000 Lux
Sample Rate	2.5 times/sec
Spectral Response	CIE luminous spectral efficiency
Photo detector	Silicon photo diode with filter
Cosine response accuracy	30° $\pm 2\%$ , 60° $\pm 6\%$ , 80° $\pm 25\%$
Size	162 x 63 x 28mm
Weight	250g



MT940

## LIGHT METER

The MT940 is a handheld light meter that provides accurate display of light levels in terms of Foot Candle (FC) or LUX over a wide range. This versatile meter offers Peak Hold and Data Hold functions and can measure light up to 20,000 Lux or FC with an accuracy of 0.01Lux/FC. The light sensor is connected through an extension cable to the meter, providing fast measurements in multiple environments. The readings are displayed on a large and clear LCD display with range announcements to assist the user. This is an essential tool for Designers or Quality Assurance Managers to troubleshoot or check lighting levels in a variety of situations from office to factory areas where health and safety is a requirement.

### Features

- Check light levels in a wide variety of situations
- Accurate test with fast response and auto zero adjustment
- 4 measuring ranges for Lux and Foot Candle
- Lux range from 200 Lux to 200,000 Lux
- Foot Candle range from 20fc to 20,000fc
- Measurement rate 2 times per second
- Peak Hold and Data Hold functions
- Symbol and unit display - easy to read

- Overrange indication
- Auto Power Off

Function	Range	Accuracy
Lux Range	200.0 to 200,000 Lux	$\pm(5.0\% +10)$
Foot Candle Range	20.00 to 20,000 fc	$\pm(5.0\% +10)$
Spectral Response	CIE Photopic (human eye response curve)	
Photo Detector	Photo diode and filter	
Sample Rate	2 times/sec	
Size	<b>Meter</b> 130 x 95 x 30mm <b>Sensor</b> 100 x 60 x 27mm	
Weight	300g	

## VIDEO BORESCOPE

The MT175 Video Borescope system features an integrated LCD colour monitor for real-time viewing and a variety of imaging and measurement functions to meet your inspection needs with a flexible gooseneck camera probe that is waterproof and retains its configured shape for inspecting hard-to-reach areas. This Borescope offers the latest video borescope technology that is diverse enough to meet your application needs. Ideal to look into tight spots, in dark and moist areas, inspect machine defects internally using the colour LCD monitor. The MT175 can be used for automotive inspection, HVAC inspection, cable routing, boat and aircraft inspection.

### Features

- 3.2" Colour TFT LCD / Resolution: 320 x 240
- On-site photo/video, time and date display
- Video/Images transferred to PC via SD card / USB cable
- 1m Flexible gooseneck for hard to reach places
- Camera/video function 3GP / Compatible with TV (TV-OUT)
- Allows viewer to view image on LCD monitor
- Viewing distance 5 to 15cm / Viewing angle 68°
- Rechargeable battery with USB included
- 32MB SD Card



Function	Range
Display screen	3.2 Inch TFT
Display pixel	240(RGB) x 320
Photosensitive Devices	1/4 inch CMOS
Sensor pixel	640 x 480
Maximum Number of frames(FPS)	30FPS/S
Colour Digit(bit)	24 bit
Focusing distance	Fixed at 5 to 15cm
Gooseneck Length	1m (2/3m selectable)
Camera diameter	17mm
TV-OUT	PAL/NTSC system
Charging system	In camera (AC adapter)
Photo resolution	640 x 480
Video format	MPEG4/3GP/AVI/ASF
Photo format	JPEG
Camera Video format	3GP
Save Image format	JPG (640 x 480)
SD Card	Max 32GB
Flash Memory	Max 8GB
Interfaces	USB data cable and SD card
Size	240 x 100 x 160mm
Weight	584g

MT175



# THERMO-HYGROMETER & LOGGERS



## THERMO-HYGROMETER

MT667 is a digital microprocessor controlled Thermo-Hygrometer with fast response and high accuracy with Dew point, Wet bulb and Temperature measurements. The Wet Bulb mode is effectively a Digital Sling Psychrometer. It is an ideal instrument for scores of practical applications for Laboratory, Industrial, Engineer and Professional use. This offers a wide variety of applications ranging from HVAC to laboratories, and is ideal in other industries such as computer rooms, hospitals, tobacco industry, factories and offices and general use.

### Features

- Microprocessor controlled
- Humidity meter 0% - 100% Humidity
- Temperature Meter -30°C to 100°C
- Wet Bulb Temperature 0°C to 80°C
- Dew Point Temperature -30°C to 100°C
- Resolution 0.01% RH and 0.01°C
- Fast response
- High accuracy
- Data Hold
- Min / Max
- °C or °F
- Dual display and backlight

Function	Range	Accuracy
Temperature	-30°C to 100°C	±(0.8°C)
Temperature resolution	0.01°C	
Relative Humidity	0 to 100%RH	
Relative humidity resolution	0.01RH	±(2.5% RH)
Dew Point Temperature	-30°C to 100°C	
Wet Bulb Temperature	-30°C to 80°C	
Size	225 x 45 x 34mm	
Weight	200g	



MT667

## USB TEMPERATURE HUMIDITY DATA LOGGER



The MT668 is a small and compact data logger for temperature and humidity. This is the easiest to use and lowest cost electronic data logger available. The MT668 has a selectable measuring time intervals from 2 seconds to 24 hours and can store up to 16,000 readings for both temperature and humidity. The user can define the upper and lower measurement parameters for temperature and humidity, and if these readings go above or below these parameters, the alarm LED will flash. With its precision calibrated internal temperature sensor, all the user has to do is place the logger in the field and leave it. Once you have gathered the desired information, simply plug the logger into a computer using the USB port and download the logged information.

### Features

- 16 000 Readings for both temperature and humidity
- Temperature -40°C to 70°C
- Humidity range 0% to 100% RH
- Selectable measuring cycle- 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr, 24hr
- Multi-mode to begin logging
- Analysis software
- Wall bracket
- Alarm function activated when set values are exceeded

Function	Range	Accuracy
Temperature	-40°C to 70°C	±(1°C)
Temperature resolution	0.1°C	
Low battery indication	Yes	
Relative Humidity	0 to 100%RH	
Relative humidity resolution	0.1RH	±(3.5% RH)
Min Max	Yes	
Data logging	32000 Data points in total	
Size	130 x 30 x 25mm	
Weight	20g	



MT668

## TEMPERATURE HUMIDITY DATA LOGGER



The MT669 is a temperature and humidity data logger designed with a high accuracy temperature and humidity sensor. This data logger provides fast response and stability. This logger gives clear readings on the large LCD display and the user can check at a quick glance the actual time of the minimum or maximum reading for temperature and humidity. The MT669 has a selectable measuring time intervals from 1 seconds to 24 hours and can store up to 16,350 readings for both temperature and humidity. The user can define the upper and lower measurement parameters for temperature and humidity and if these readings go above or below these parameters, the alarm LED will flash.

### Features

- Total data storage: 32 700 Readings
- 16 350 Readings for each temperature and humidity
- Temperature -40°C to 70°C
- Humidity range 0% to 100% RH
- Selectable measuring cycle: 1s to 24hr
- Multi-mode to begin logging
- Analysis software
- Lockable wall bracket
- Alarm function activated when set values are exceeded

Function	Range	Accuracy
Temperature	-40°C to 70°C	±(1°C)
Temperature resolution	0.1°C	
Relative Humidity	0 to 100%RH	
Resolution	0.1 RH	±3.5%
Data	32700 Points	
Size	101 x 24 x 21.5mm	
Weight	91g	



MT669

## MINI HYGROMETER



The MT91 mini hygrometer measures relative humidity, temperature, and dew point while the modern ergonomic design with large backlit dual display makes it easy to use in any application. Relative humidity is normally expressed as a percentage, a higher percentage means the air-water is more humid. At 100% humidity, the air is saturated and at dew point. The Bluetooth connectivity allows users to transfer and share measured data to a smart phone and the app is available on both Android and IOS platforms. Other features include Min/Max record more and data hold.

### Features

- Dual Digital LCD
- Measure ambient Temperature and Humidity
- Data hold function
- Min/Max reading
- Bluetooth BLE
- Auto power off

Function	Range	Accuracy
Temperature	-20° to 60°C	±(0.5°C)
Relative humidity	0 to 100%RH	±(3.5% RH)
Dew Point Temperature	-20°- 60°C	±(0.5°C)
Wet Bulb Temperature	0°- 60°C	±(0.5°C)
Data Logging Bluetooth	BLE 4.0	
Size	204 x 54 x 36mm	
Weight	172g	



MT91



MT970

## PARTICLE COUNTER

MT970 is a Particle Counter with 2.8 colour TFT LCD display that shows real scene and time display. Is supplied with a micro SD memory card for capturing images (JPEG) or video (3GP) for viewing on you PC, and providing fast, easy and accurate readings. Ideal combination instrument for measuring of particle concentration, gas (HCHO, CO) detectors, air temperature, relative humidity and wet bulb temperature measurements. MT970 is the perfect instrument for industrial measurements and data analyzing.

### Features

- Particle measurements
- Air measurements
- Dewpoint measurements
- Wet bulb temperature
- Air Humidity measurements
- 2.8: TFT 320 x 240 pixels colour LCD
- Images (JPEG) and Video (3GP)
- Simultaneously measure and display 6 channel of particle sizes
- Measure particle size down to 0.3µm
- Gas (HCHO, CO) detectors
- Min / Max / DIF / Average
- Date / Times / Alarm
- MicroSD (8GB) / Bluetooth / USB
- Selectable sample time, count data, programmable delay
- Memory 5000 readings
- Data logger

Function	Range	Accuracy
Channel	0.3, 0.5, 1.0, 2.5, 5.0, 10µm	
Air temperature	10°C to 50°C	±(0.5°C) 10°C - 40°C
Humidity	0 - 100% RH	±(3%RH) 40% - 80%
Dew Point temperature range	0°C to 50°C	±(0.5°C) 10°C - 40°C
Images and Video	JPEG and 3GP	
Flow rate	0.1ft <sup>3</sup> (2.83L/min) controlled by internal pump	
Counting Efficiency	50% @ 0.3µm; 100% for particles less than 0.45µm	
Coincidence Loss	5%, 2,000,000 particles per ft <sup>3</sup>	
Count modes	Cumulative, Differential, Concentration	
Storage	Micro SD max 8GByte	
Data	5000 sample records	
Size	240 x 75 x 57mm	
Weight	570g	



MT96

## MINI PARTICLE COUNTER

The MT96 Particle Counter with a 2" colour TFT LCD display provides fast, easy and accurate readings for particles down to 2.5µm for particle counter and particle mass concentration with air temperature and relative humidity. The dew point temperature measurement will be very visible for wet and dry proof. It is the first measurements in global, and would be the ideal instrument for environment protection and energy saving.

### Features

- 2.0" TFT Colour LCD
- Measure particle in the air
- Relative humidity and temperature
- Auto power off
- Simultaneously measures PM2.5 & PM10
- Analogue bargraph indication
- Memory 5000 readings
- Date/Time/Alarm
- Selectable sample times 30s, 1min, 2min or 5min

Function	Range	Accuracy
Channel	2.5µm, 10µm	
Mass Concentration	PM2.5:0 to 2000ug/m <sup>3</sup>	
	PM10:0 to 2000ug/m <sup>3</sup>	
Resolution	1ug/m <sup>3</sup> s	
Air Temperature range	0°C - 50°C	±(1°C)
Humidity range	0 - 100%RH	±(3.5%RH) @ 20% - 80% RH
Humidity Resolution	0.1%RH	
Size	185 x 55 x 38mm	
Weight	139g	



MT662

## DESKTOP TEMPERATURE & HUMIDITY METER

The MT662 is a triple display low cost combined clock/alarm, temperature and humidity meter with a temperature range from 0°C to 50°C, and humidity range from 10% to 90%. The MT662 offers a "Comfort Zone" indicator which is displayed when the temperature is between 18°C and 22°C and the Humidity is between 45% and 65%. Other features include a MIN/MAX record mode, temperature and humidity trend mode. This meter is wall mountable or can stand on a desk top and is ideal for use in checking the climate in offices, shops, factories, home and green houses.

### Features

- Triple display low cost combined clock / alarm, temperature and humidity meter
- Temperature range from 0°C to 50°C
- Humidity range from 10% to 90%.
- Min / Max
- °C or °F
- Highest / Lowest temperature
- Humidity memory function
- Wall mountable and can stand on a desk top

Function	Range	Accuracy
Temperature	0°C to 50°C	±(1.0°C)
Temperature resolution	0.1°C	
Relative Humidity	10 to 90%RH	
Relative humidity resolution	0.01RH	±(5% RH)
Size	108 x 60 x 15mm	
Weight	74g	

# ENVIRONMENT METERS



## 5-IN-1 ENVIRONMENT METER

The 5-in-1 digital Multifunction Environment Meter has been designed to combine the functions of a Sound Level Meter, Light Meter, Humidity Meter, Temperature Meter and CFM/CMM Thermo-Anemometer. It is an ideal Multifunction Environment Meter with scores of practical applications for professional and home use. The Sound level function can be used to measure noise in factories, schools, offices, home, etc, checking acoustics of studios, auditoriums and hi-fi installations. The Light function is used to measure luminance in the field. It is fully cosine corrected for the angular incidence of light. The light sensitive component used in the meter is a very stable, long life, silicon diode. The Humidity/Temperature uses a humidity/semiconductor sensor and K-type thermocouple. CFM/CMM Thermo-Anemometer is suitable for use in a wide variety of applications, including plant maintenance operations, environmental analysis, fume hood testing, and HVAC system assessments.

### Features

- Large LCD display with backlight.
- MAX, MIN and AVG measurements.
- Display shows Sound, Light, K-Type Temperature, Humidity & Temperature as well as Air Velocity & Air Flow.
- Electronic Offset function allows compensation of thermocouple errors to maximize overall accuracy.
- The device measures air velocity, it features 5 selectable units of velocity measure: m/s, ft/min, km/h, MPH, knots, and it features 2 selectable units of flow measure: CFM, CMM.
- Easy to set Area dimension (up to 6 points) for air flow measurement.
- USB interface, USB to UART Bridge Controller.
- Low battery indication, Auto Power Off (Sleep mode) adjustable.

Function	Range
Sound Level	30dB -130dB
Light	20-20000Lux
Humidity and Air Temperature	5%-98%RH -30 - 99.9°C
K Type Temperature	-200°C - 1375°C
Air Velocity	(0.40~30)m/s (196~5900)ft/min (3.6~108.0)km/h (2.2~67.0)MPH (1.9~58.0)Knots
Air Flow	(0~999900)CFM (0~999900)CMM
Operating Conditions	0 to 50°C
Size	251 x 63.8 x 40mm
Weight	365g



MT941

## 6-IN-1 ENVIRONMENT METER



The MT1875 has standard digital multimeter functions like the ability to measure voltage, current, continuity, resistance, temperature, frequency and diode test and can perform additional functions to solve environmental conditions. The 6-in-1 MT1875 has been designed to combine sound levels, Lux, humidity, Temperature, Non contact AV Voltage all in one versatile Digital Multimeter. Ideal for practical applications for professional and home use.

### Features

- AC V / DC V 600V
- Fully functional DMM
- Sound Level Meter 100dB
- Light Meter 40 000 Lux
- Humidity Meter 95% RH
- Resistance 40MΩ
- Temperature 750°C
- Capacitance 100μF
- Frequency 10MHz
- Duty Cycle
- 4000 Count LCD
- Diode Check
- Continuity

Function	Range	Accuracy
DC Voltage	600V	±(1.0% +4)
AC Voltage	600V	±(1.0% +4)
DC Current	10A	±(1.0% +2)
AC Current	10A	±(2.0% +5)
Resistance	40MΩ	±(1.5% +2)
Temperature	-20°C to 750°C	±(3.0% +5)
Temperature resolution	1°C	
Frequency	10MHz	±(1.2% +5)
Duty Cycle	0.1 to 99.90%	
Capacitance	100.0μF	±(3.0% +5)
AC Bandwidth	50Hz to 400Hz	
dB Measurements	35-110dB	
Humidity	33%-99%	±(3.0% +5)
Lux	4000-40 000Lux	±(5.0% +10)
Size	170 x 79 x 50mm	
Weight	342g	



MT1875





MT975

## SOUND LEVEL METER

The professional digital model MT975 offers A and C weighting measurements, maximum hold function and Slow and Fast response. The AC/DC outputs are ideal for connections to frequency analyser, level recorder, FFT analyser and graphic recorder or X-Y chart recorder. The MT975 meter is ideal for all general purpose measurements and the Level Function is designed for noise project, quality control, illness prevention and cure, plus all kinds of environmental sound measurements. It can be used to measure noise in factories, schools, airports and home, etc. Other uses could be for checking acoustics of studios, auditoriums and Hi-Fi installations. The MT975 is auto ranging and has a large backlit LCD with the benefit of a Quasi-Analogue bar indicator. Features include an analogue output, Min/Max record can be interfaced with a computer via the USB interface, software and cable are supplied as standard accessories

### Features

- A and C level weighting for checking in compliance with safety regulations IEC61672-1 class 2
- Level weighting 30dB to 130dB
- Min/Max measurements
- Background noise absorber
- 1.4dB accuracy
- Fast / slow response
- Analogue AC / DC outputs
- Datalogger function
- Memory for 32 700 readings

Function	Range	Accuracy
Level ranges low	30dB to 80dB	±(1.4dB)
Level ranges medium	50dB to 100dB	±(1.4dB)
Level ranges high	80dB to 130dB	±(1.4dB)
Level ranges auto	30dB to 130dB	±(1.4dB)
Dynamic range	50dB to 100dB	
Data logging	32700 readings	
Frequency Range	31.5Hz to 8KHz	
Frequency weighting	A/C	
Time weighting	Fast (125ms) Slow (1s)	
Microphone	½ Electret condenser	
Alarm function	over and under limit range	
Analogue output	AC/DC from earphone, AC equals 1Vrms, DC equals 10mV/db	
Size	278 x 76 x 50mm	
Weight	350g	



MT95

## MINI SOUND LEVEL METER

The MT95 mini sound level meter has a wide dynamic range from 35dB to 130dB and a different frequency weighting, A and C, to respond to human sense or machine monitoring purposes while the modern ergonomic design with large backlit dual display makes it easy to use in any application. The Bluetooth connectivity allows users to transfer and share measured data to a smart phone and the app is available on both Android and iOS platforms. This is the perfect meter where measurements are required in noisy engineering, sound quality control, health, industrial safety offices in various environments, schools, and traffic noise pollution.

### Features

- 4 Digit display with an analogue Bargraph
- A & C level weighting for checking in compliance with safety regulations IEC 61672-1 class 2
- Sound Level range 35dB to 130dB
- Hi & Lo range settings
- Background noise absorber
- Min, Max and Data Hold
- 0.5" Electret Condenser Microphone
- Auto Power Off

Function	Range	Accuracy
Sound Level	35dB - 80dB	±(3.0dB)
Level ranges medium	50dB - 100dB	±(3.0dB)
Level ranges high	80dB - 130dB	±(3.0dB)
Level ranges auto	35dB - 130dB	±(3.0dB)
Frequency range	31.5Hz - 8KHz	
Frequency weighting	A/C	
Microphone	½" Electret condenser	
Digital Display resolution	0.1dB	
Sample rate	2 times per second	
Alarm function	"over" limit range	
Data output	Bluetooth	
Size	185 x 54 x 36mm	
Weight	139g	



## COMBUSTIBLE GAS DETECTOR

The MT982 is a technological design for detecting combustible gases. The gooseneck allows the user to find the leaks in the most awkward of places, and is an ideal tool for a variety range of applications where gases need detection in hazardous areas. The MT982 is an easy to use combustible gas leak detector with one handed operation to detect presence of combustible gases. Audible and visual indicators help pinpoint leak source. Adjustable "tic" rate helps eliminate background gas concentration in contaminated environments.

### Features

- New technological design for detecting combustible gases
- 50ppm Methane
- 400mm Gooseneck
- Highly sensitive & reliable
- Use in contaminated environments, eliminates gas concentration with fully adjustable tick rate
- Tick accelerates when sensor tip approaches leak
- Pin points small leaks
- Adjustable sensitivity
- Locating halogen based gases such as refrigerants

Function	Range
Sensor type	Low power semiconductor
Warm up time	Approx 60 seconds
Response time	Less than 2 sec (up to 40% lcl)
Sensitivity	50 ppm methane
Probe length	400mm (16 inch)
Alarm	Visible and audible at 10% methane
Size	221 x 72 x 46mm
Weight	520g



MT982

## REFRIGERANT LEAK DETECTOR

The refrigerant leak detector detects all CFC refrigerants such as R-22, R-124, R-11 and R-12. The ultra-sensitive long life sensor detects the more current and difficult to detect HFC refrigerants such as R-134a, R-404A, and new R-22 replacements, R410A and R-407C.

The MT980 comes with a 400mm long, slim gooseneck probe that is easy to use in hard-to-reach places. The detector is an easy to use one handed operation with thumb controlled tick adjustable knob. The tick sound accelerates when the sensor tip approaches the leak

### Features

- Technological design for detecting current halogen based gases
- 100ppm of R - 134a / R - 22
- Detects CFC & HFC
- Flexible 400mm gooseneck
- Visual leak detection by LED indicators
- Adjustable tick rate to locate leaks quickly and easily
- Precision sensor detects even the smallest leaks
- Includes earphone Jack

Function	Range
Sensor type	Low power semiconductor
Warm up time	Approx 60 seconds
Response time	Less than 2 sec (up to 40% lcl)
Sensitivity	100ppm of R134a/R-22
Probe length	400mm (16 inch)
Alarm	Visible and audible at 10% lcl for all Chloroflucarbons (CFC)
Size	221 x 72 x 46mm
Weight	498g



MT980

## AIR QUALITY CO<sub>2</sub> MONITOR

The MT182 is a air quality monitor detector with exquisite concise and efficient detector which is integrated with CO<sub>2</sub>, temperature and humidity detection. The device has a high precision CO<sub>2</sub> sensor which can detect CO<sub>2</sub> accurately and sensitively. The MT182 not only displays the readings on a negative LCD display, but also has a colour bargraph indication to indicate the CO<sub>2</sub> grade level – Green is Good, Yellow is Normal and Red is Poor. The unit has a 1000mAh high capacity rechargeable lithium battery and a battery icon indicating the battery status. The operation of the unit is simple and very convenient to carry, especially to check the air quality from time to time in various areas.

### Features

- Accurate CO<sub>2</sub> measurements
- Checks for Carbon Dioxide (CO<sub>2</sub>) concentrations
- Indoor Air Quality displayed in PPM
- Colour bargraph indication of Air Quality with Green, Yellow and Red indication
- Simultaneously displays CO<sub>2</sub> concentrations, Temperature and Humidity
- Easy to read large dual display
- Rechargeable lithium battery
- Low battery indication

Function	Range	Accuracy
CO <sub>2</sub> Concentration measurement	0 to 5000ppm	±75ppm ±5% of rdg
Temperature	-10.0°C to 50°C	±1°C
Humidity	0.0 to 100% RH	±5% RH
Battery	1000mAh rechargeable lithium battery	
Charging	Micro USB DC 5V 1A	
Size	104 x 60 x 35mm	
Weight	116m	

Range (PPM)	Grid	Colour	Grade
<800	1	Green	GOOD
800 to 1500	2	Yellow	NORMAL
>1500	3	Red	POOR



MT182





## CABLE METERS

### CONTENTS

Cable & Circuit Locator	87
Cable Identifier	87
Cable Length Meter	88
Lan Tester & Digital Multimeter	88
Tone & Probe Tester	88
TDR Cable Length Meter	89
VDV Wire Tester	89



CABLE LOCATOR



The MT195 Cable Locator is the ideal tool to detect electrical power cables, communication cables, metal pipes and much more during construction, maintenance, or renovation. Pinpoint pipes and cables in walls or underground with precision by identifying the corresponding signal number sent by the transmitter. The transmitter and receiver with their advanced digital circuit technologies ensures a highly stable and reliable performance. The transmitter not only sends signals but can be used as an AC/DC voltmeter displaying the voltage on the tested line. When testing on electrical circuits, the receiver can quickly identify circuit breakers in the distribution board of the circuit the transmitter is connected to or visa versa. The receiver displays the value of the signal measured and it can be used to check short circuits or breaks on existing installations, ideal for underfloor heating systems. The MT195 set is lightweight and is supplied with a complete set of accessories for direct measurement.

Features

- Detects cables, electrical wire, water/gas supply pipelines concealed in walls and ground
- Detects interruptions and short circuits in cables and concealed electrical wire
- Tracing sockets and distribution sockets having accidentally been covered by plastering
- The transmitter measures voltage from 12V to 400V AC/DC
- The screen of transmitter displays preset transmitting power, transmitted codes and voltage
- Transmitter has self-inspection displaying status on LCD
- Both transmitter and receiver have flashlight function
- Output signal 125kHz
- Detects interruptions and short circuits in floor heating
- The LCD of receiver displays preset transmitting power, transmitted codes and voltage
- The sensitivity of the receiver can be adjusted manually or automatically
- The receiver can sweep frequency automatically
- Identifies fuses and assigned current circuits
- Mute mode can be set for both the transmitter and receiver
- Auto Power Off
- Additional transmitters are available to extend or verify several functions

Function	Range	Accuracy
<strong>Transmitter</strong>		
Output signal	125 kHz	
External Voltage Range	12V to 400V DC 12V to 400V AC	$\pm(2.0\%)$ $\pm(2.5\%)$
Power consumption	115mA approx.	
Operating Temperature	0°C to +40°C	
Operating Humidity	20% to 60% RH	
Size	190 x 89 x 43mm	
Weight	420g	
<strong>Receiver</strong>		
Cable locating mode	0 to 2 meters (Single pole application) 0 to 0.5 meters (Dual pole application) 0 to 2.5 meters (Single loop line)	
Grid Voltage Identification	0 to 0.4 meters approx.	
Power consumption	32mA (Min current), 89mA (Max current)	
Operating Temperature	0°C to +40°C	
Operating Humidity	20% to 60% RH	
Size	242 x 78 x 39mm	
Weight	350g	



MT195T



MT195

CABLE IDENTIFIER



The MT915 is an amazing tracing system which will save hours instead of Belling-Out any circuit. The MT915 consists of a transmitter & receiver device which enables one person to instantly match up ends of individual cores at either end of a multi-core cable. With the remote kit the meter can test cables installed over long distances either on wall plates or patch panels. The DMM function makes it easy to measure AC Volts, DC Volts, AC and DC Current, Resistance, Continuity and Diode Test.

Features

- Identifies up to 16 cables
- Cuts out "Bell-Out" time
- Cable Resistance 30kΩ max
- Digital multimeter
- 600V AC/DC
- 200mA AC/DC
- Resistance 20MΩ
- Diode Check
- 2000 Count LCD
- Continuity

Function	Range	Accuracy
DC Voltage	600V	$\pm(1.0\% +3)$
AC Voltage	600V	$\pm(1.0\% +5)$
DC Current	200.0mA	$\pm(1.5\% +3)$
AC Current	200.0mA	$\pm(1.8\% +8)$
Resistance	20MΩ	$\pm(1.2\% +3)$
Size	162 x 74 x 43 mm	
Weight	308g	



MT915T



MT915



MT933

## CABLE LENGTH METER

The MT933 is a 60 000 count handheld battery operated metric cable length meter that quickly measures any reeled wire or cable up to 30 000m and with gauges ranging from 0.15mm<sup>2</sup> to 240mm<sup>2</sup>. Within seconds cables can be measured and digitally displayed without the cumbersome task of unrolling cable reels. All that is needed is accessibility to both cable ends. The MT933 can also be used as a precision milliohm meter.

The User Select Mode allows the user to save the resistance of a user wire for additional measurements of unknown lengths of the same wire gauge. In addition, it enables the user to accurately measure the length of standard gauge wire or cables. In this mode, the user can measure the length of any metal wire, resistance of which can be measured, as well as Copper or Aluminium cables. Temperature is also displayed on the large backlit LCD display. This instrument is very useful for Electrical Contractors, Utilities and Distributors for the control of inventories of cable.

### Features

- 60 000 count backlit LCD display
- Measure up to 30 000m
- 20 pre-set wire gauge settings 0.15mm<sup>2</sup> to 240mm<sup>2</sup>
- 8 memory locations in user select mode
- Automatic temperature compensation
- Measures Aluminium (Al) and Copper (Cu) cables and wire
- Measures and indicates Temperature
- User Calibration mode
- Measures in meters (m) and feet (ft)
- Kelvin clip test leads included
- Built-in buzzer
- Auto Power Off

Function	Range	Accuracy
Cable Length	0.1m to 30.00km	±(1% +1m)
	0.1ft to 100kft	±(1% +1ft)
Resistance	2000.0mΩ – 2000Ω	±(1.0% +3)
Temperature	-5°C to 50°C	±(2.0% +1.8°C)
Size	210 x 97 x 68mm	
Weight	634g	



MTC50

## 2-IN-1 LAN TESTER & DMM



The MTC50 is a 2-in-1 LAN tester and multimeter and is a newly designed and very practical tester that can easily read the correct pin configuration of 10/100 Base-T cable (Category 5), 10Base-2 cable (coax), RJ45/RJ11 modular cables, AT&T 258A, 356A, TIA 568A/568B and Token Ring cable by comparing one transmitting end to the corresponding receiving end.

With the remote kit test cables can be installed over long distances either on wall plates or patch panels. It is easy to verify the cable continuity, open, short and cross-connect. The auto range digital multimeter allows the user to measure AC and DC voltage, AC and DC current, Resistance, Continuity and Diode test.

### Features

- RJ45 and RJ11 modular connectors
- Tests CAT5 installations
- Remotely test cables 300m away
- Locked status wiring
- Digital Multimeter
- AC / DC V 600V
- Amps 200mA
- Resistance 20MΩ
- Diode Check
- Continuity
- 2000 Count LCD

Function	Range	Accuracy
DC Voltage	600V	±(1.0% +3)
AC Voltage	600V	±(1.0% +5)
DC Current	200.0mA	±(1.5% +3)
AC Current	200.0mA	±(1.8% +8)
Resistance	20MΩ	±(1.2% +3)
Digital Display	2000	
Overrange indication res.	less than 7.5MΩ VDC & less than 7.5MΩ VAC	
Lan Tester	RJ45 and RJ11 + BNC	
Size	162 x 74 x 43 mm	
Weight	308g	



MTC40

## TONE AND PROBE TESTER

The MTC40 Tone and Probe generator traces cables using a tone generator connected on one side and at the other end the probe. This tests even when cables are in a bundle. It is easily used to verify cable continuity, pair condition, line polarity and voltage in networking cabling systems for CAT5, coax and modular telephone lines.

### Features

- RJ11 modular connectors
- Built-in speaker on probe with sensitivity control
- Traces & identifies wires / cables in a bundle or group
- Insulated inductive probe tip prevents shorting conductors
- Tests include wire trace / continuity test clear / busy ringing line test and tip/ring identification

Function	Range
Tone and Probe	
Tester	Cable and Wire; RJ11
Tracing	Telephone, cable and wire
Enclosure	Moulded casing
Batteries	2 x 9V
Size	Probe 231 x 56 x 27mm Generator 59 x 59 x 34mm
Weight	270g

# CABLE METERS



## TDR CABLE LENGTH METER

The MT900 is a precision cable length meter that uses TDR (Time domain reflectometer) technology to measure cable length. The meter can be used for any cable consisting of at least two insulated metallic elements, one of which may be the sheath or shield of the cable.

It has an automatic internal matching network to allow testing with an automatic selection range, which correspond to telephone, CAT 5 and Coax cables. The meter can be closely matched to the cable under test using the function selection keys. The Velocity of propagation (V.O.P.) value can be similar adjusted to match the cable under test, thus ensuring an accurate distance measurement.

The MT900 meter has a cable library for quick and easy access to 20 standard cable types, which enables accurate measurement without necessity of entering V.O.P. (Velocity of Propagation). This cable meter can also store up to 99 internal memory locations which can be used for future analysis. The V.O.P. can be calculated for the cable under test and added to this library.

### Features

- Measures cables up to 3.0km
- 20 Standard Cables Library
- 99 Internal memory locations store up to 99 traces for future analysis
- Measures V.O.P (Velocity Of Propagation) of a sample cables
- Automatic output impedance and range control
- Auto-Zero / Auto range
- 2.4 inch TFT Colour Screen
- High accuracy and fast reflection
- Auto-Sensitivity allows for closer matching to a wide range of cable under test, only V.O.P. settings required

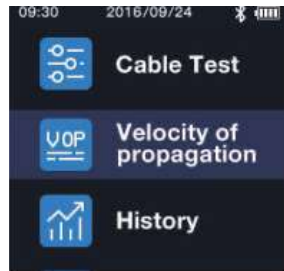
Function	Range	Accuracy
Maximum range @ V.O.P 99.9%	3.0 km @ VOP ≤ 99.9%	±(2% +0.2m)
Maximum range @ V.O.P 80.0%	2.4 km @ VOP ≤ 80.0%	±(2% +0.2m)
Maximum range @ V.O.P 66.0%	2.0 km @ VOP ≤ 66.0%	±(2% +0.2m)
Maximum range @ V.O.P 50.0%	1.5 km @ VOP ≤ 50.0%	±(2% +0.2m)
Range selection	Automatic	
Output Impedance	25, 50, 75, 100, 125 or 150 ohms	
Impedance Selection	Automatic output impedance control	
Velocity factor	Adjustable from 1.0% to 99.9%	
Cable Library	20 standard cable types	
Memory location	99 for Custom cable types	
Connector	BNC/RJ45	
Line Voltage detection	6.5V	
Dead zone	5m pair cable or coaxial, 10m single cable	
Digital Display	2.4 inch TFT colour screen	
Size	152 x 61 x 34mm	
Weight	227g	



MT900



TFT Full Colour Screen



Easy to use Function menu



Built-in 20 groups of standard cable V.O.P value



99 internal memory locations

## VDV WIRE TESTER

The MT902 is a professional VDV Wire Tester that analyses patch leads on phones, computer networks and coax cables in one easy step. This portable Voice, Data and Video meter is used to verify and troubleshoot RJ11, RJ12, RJ45 and F-connector cable. Indication on the large LCD display will map out and indicate open faults, short faults, split pairs and reverse wiring together with icons of PASS and FAIL status. The MT902 comes standard with 5 RJ45 Data and 5 Coax F-Connector identification remotes that can be used by technicians to permit mapping as well as identify cable runs from patch panels to a wall outlet ports. The built-in tone generator can be used to locate cables in wiring closets and patch panels by using an optional amplifier probe. Housed in a rugged double moulded case will provide years of reliable service.

### Features

- Analysing of Voice, Data and Video cables
- Tests shielded twisted pair (STP), unshielded twisted pair (UTP) and coaxial cables.
- Detects shorts, opens, reversed polarity, crossed and split pairs
- 5 Data RJ45 Remote Identifiers, 5 Coax F-Connector Remote Identifiers
- Generates three distinct, selectable digital tone patterns for cable tracing and trouble shooting
- Flashing Voltage warning alerts user of unidentified hazardous voltage
- Simple cable identification of patch panel or wall outlet port
- Low Battery indication and Auto Power Off
- PASS or FAIL indication of correct or error in wiring
- Large LCD backlit display

Function	Range
Maximum Cable Length for Split Pairs Detection	0.5 meters
Maximum Coax Cable Length	305 meters
Maximum Coax Cable Resistance	100Ω maximum DC
Maximum Voltage between any two pins without damage	60V DC or 55V AC
Cable Types	Cat 7, Cat 7a, cat 6a, Cat 6, Cat 5e, Cat 5, Cat 4, Cat 3, Coax
Operating Temperature	0°C to +50°C
Operating Humidity	10% to 90% RH
Size	152 x 61 x 34mm
Weight	230g



MT902





## SPECIALIST METERS

### CONTENTS

Laser Distance Meters	91
Tachometers	92
Coating Thickness Meter	92
Vibration Meter	93
Moisture Meters	93
LCR Meter	94
Capacitance Meter	94
Milliohm Meter	94
Process Calibrator	94

# LASER DISTANCE METERS



## 100m LASER DISTANCE METER



This professional Laser Distance Meter is designed to give special users a high accuracy, one person distance measuring and estimating tool to measure remote and difficult reaching places. This meter has the enhanced ability to take measurements in outdoor applications. Shortcut keys for addition, subtraction, Pythagoras, area and volume calculation make measuring fast and very reliable. The last 20 measurements are stored and can be transferred via Bluetooth to Android or iOS mobile devices. The IP54 double moulded rubber case is splash proof and dust resistant.

### Features

- Area, Volume Calculations
- Indirect measurement using Pythagoras
- Indirect measurement using tilt sensor
- Angle measurement using tilt sensor( $\pm 65^\circ$ )
- Addition/Subtraction
- Continuous Measurement & Timer (self-triggering)
- Min/Max Distance Tracking
- Laser continuous
- Stake out function
- Display illumination and multi-line display
- Multifunctional endpiece
- Tripod thread
- Bluetooth 4.0 with APP support
- Meterbox iLDM & cloud service

Function	Range
Measuring Range	0.05 to 100m
Measuring accuracy ( $2\sigma$ )	Typically: $\pm 1\text{m}$
Measuring units	m, ft
Laser Class	Class I
Smallest unit displayed	1m
Dust Protect/Splash proof	IP54
Operating Temperature	-10°C to 50°C
Storage Temperature	-20°C to 60°C
Size	115 x 75 x 40mm
Weight	203g



MT152

## 50m LASER DISTANCE METER



The MT150 is a Bluetooth pen-shaped professional laser distance meter capable of measuring lengths up to 50m, designed to provide high accuracy. This is a one person measuring and estimation tool ideal for measuring remote and difficult to reach places. The meter offers area and volumetric calculations as well as a continuous measurement mode plus has the added features of a built-in level and a buzzer indication. The Bluetooth function allows the user to transmit data to the Android or iOS mobile App for viewing, organising and sharing recordings. The IP54 double moulded rubber case is splash proof and dust resistant.

### Features

- Bluetooth 4.0 with App support
- Distance measuring and estimate tool
- Area, Volume calculations
- Measures up to 50m with 1.5mm accuracy
- Indirect measurement using Pythagoras
- Addition / Subtraction
- Continuous measurement
- Min / Max distance tracking
- Display illumination and multi-line display
- Store 20 measurements
- Best for indoor applications
- IP54 Splash Proof & Dust Resistant

Function	Range
Range	0.05 to 50m
Measurement units	m, in & ft
Laser class	Class II
Laser type	635nm, less than 1mW
IP Grade	IP54
Size	135 x 33 x 24mm
Weight	80g



MT150

## 20m LASER DISTANCE METER



The MT145 is a Bluetooth compact mini laser distance meter capable of measuring lengths up to 20m, designed to provide high accuracy. This is a one person measuring tool ideal for measuring remote and difficult to reach places. The meter measuring units of metres (m), inches (in) and feet (ft) with a continuous measurement mode where readings are updated approximately every 0.5 seconds. The Bluetooth function allows the user to transmit data to the Android or iOS mobile App for viewing, organizing and sharing recordings. The IP54 double moulded rubber case is splash proof and dust resistant.

### Features

- Unit selectable (m, ft, in)
- Area, Volume Calculations
- Continuous Measurement
- Min/Max Distance Tracking
- Bluetooth 4.0 with APP support
- Reference level selectable
- Display illumination and 3-line display.
- Buzzer indication
- IP54 Splash Proof & Dust Resistant

Function	Range
Measuring Range	0.05 to 20m
Measuring accuracy ( $2\sigma$ )	Typically: $\pm 1.5\text{mm}(\pm 0.06\text{in})$
Smallest unit displayed	1mm
History measurement records	20
Measuring units	m, in & ft
Laser Class	Class II 650 nm, < 1mW
Dust Protect/Splash proof	IP54
Operating Temperature	-10°C to 50°C
Storage Temperature	-20°C to 70°C
Auto. laser switch-off	after 0.5 min
Auto instrument switch-off	after 3 min
Size	100 x 30 x 22mm
Weight	100g



MT145



## CONTACT/NON-CONTACT TACHOMETER



MT952

The MT952 is a combination non-contact and contact digital tachometer for convenient, fast and accurate measuring of high rotational speeds up to 100 000RPM. The MT952 is supplied standard with an adaptor that converts the MT952 into a tachometer for measuring surface and axial speeds. The meter is capable of various measurements such as Rotation Speed, Total Revolutions, Frequency, Surface speed and length. The instrument is ideally suited for use with engines, process machinery, motors and machine tools.

### Features

- Combination non-contact and contact digital tachometer for convenient, fast and accurate measuring of high rotational speeds up to 100 000RPM
- RPM Contact range 2 - 20 000RPM
- RPM Non-contact range 2 - 100 000RPM
- Detecting distance 50 - 500mm
- 5 Digit backlit LCD
- Auto Range
- Data Hold
- 40 Reading memories
- Min / Max / Avg
- Resolution 0.1RPM
- Built-in laser spot

Function	Range	Accuracy
Non contact test range	2 to 99 999RPM	
Non contact resolution	0.1RPM	±(0.05% +1)
Sampling time	0.5 seconds (over 120RPM)	
Detection distance	50mm to 500mm	
Time base	Quartz crystal	
Contact test range	2 to 20 000RPM	
Contact resolution	0.1RPM	±(0.05% +1)
Size	162 x 74 x 43mm	
Weight	160g	



MT950

## NON-CONTACT TACHOMETER

The MT950 provides fast and accurate non-contact revolutionary measurements for rotating objects. Using reflective tape on an object to be measured, simply point the laser at the object, the tachometer RPM will then measure up to a maximum of 100,000 revolutions with an accuracy of ±0.05% and a fast sampling time of 0.5 seconds. The MT950 has a built-in memory that recalls the Min/Max and last value stored. The meter can also be used as a Total TOT counter where the meter can be set up to count passing objects. The MT950 is lightweight and easy to operate.

### Features

- Fast and accurate non-contact RPM and TOT measurements of rotating objects
- RPM Non-contact range 2 - 100 000RPM
- TOT count mode range from 1 - 100 000RPM
- Detecting distance 50 - 500mm
- 5 Digit backlit LCD
- Auto Range
- Data Hold
- 40 Reading memories
- Min / Max
- Resolution 0.1RPM
- Built-in laser spot

Function	Range	Accuracy
Non contact test range	2 to 99 999RPM	
Non contact resolution	0.1RPM	±(0.05% +1)
Count range	1 to 99 999 REV	
Sampling time	0.5 seconds (over 120RPM)	
Detection distance	50mm to 500mm	
Time base	Quartz crystal	
Size	160 x 58 x 39mm	
Weight	151g	



MT155

## COATING THICKNESS TESTER

The MT155 is a compact and handy gauge, designed for non-destructive, fast and precise coating thickness measurements. It is adaptable and can be used on special geometries or on materials with special properties. The coating thickness gauge works either on the magnetic induction principle or on the eddy current principle, depending on the type of probe used, the MT155 has 31 working modes. The MT155 display the measured values and user information on the LCD, the backlight ensures easy reading of screen data in dark conditions. The probe systems are spring-mounted in the probe sleeve this ensures safe and stable positioning of the probe and constant pressure. The hemispherical tip of the probe is made of hard and durable material.

### Features

- Dual technology
- Automatic selection of magnetic induction or Eddy Current measurement techniques
- Memory 320 readings
- Non magnetic coatings (paint, zinc) on steel
- Insulating coatings (paint) on non-ferrous metals
- No-ferrous metal coatings on insulating substrates
- Continue & Single mode
- Working modes: Direct & Group
- Static display: Min / Max / Average / No / S.Dev
- High / Low alarm
- USB Interface

Function	Range	Range
Sensor Probe	Fe	Non-Fe
Working principle	Magnetic Induction	Eddy current principle
Measuring range	0 ~ 1350µm, 0~53.1mils	0 ~ 1350µm, 0~53.1mils
Guaranteed tolerance (of reading)	0-1000µm ±(2.5%+2µm) 1000~1350µm ±(3.5%) 0~39.3mils, ±(2%+0.08mils) 0~39.53.1mils, (±3.5)	0-1000µm ±(2.5%+2µm) 1000~1350µm ±(3.5%) 0~39.3mils, ±(2%+0.08mils) 0~39.53.1mils, (±3.5)
Precision	0~100µm (0.1urn) 100~1000µm (0.1urn) 1000~1350µm (0.01mm) 0~10mils (0.01mils) 10~53mils .1mils (0.1mils)	0~100µm (0.1urn) 100~1000µm (0.1urn) 1000~1350µm (0.01mm) 0~10mils (0.01mils) 10~53mils .1mils (0.1mils)
Minimum Curvature Radius	1.5mm	3.0mm
Diameter of Minimum Area	7.0mm	5.0mm
Minimum Measurable Thickness	0.5mm	0.3mm
Size	113.5 x 54 x 27mm	
Weight	110g	





# VIBRATION / MOISTURE METERS



## VIBRATION METER

The MT965 is a portable vibration meter used for measuring acceleration and velocity. All industrial machinery vibrates therefore knowing the level of vibration is a useful guide for determining the machine condition. Poor balance, misalignment and looseness of the structure will cause the vibration level to increase. This is a sure sign that maintenance is needed. The MT965 has a microprocessor and is the ideal instrument for industrial vibration monitoring.

### Features

- Measuring acceleration and velocity
- Velocity Range 200mm/s<sup>2</sup>
- Min / Max
- Frequency 10Hz - 1KHz
- Separate vibration probe with magnetic base
- RMS and peak measurement
- Microprocessor based

Function	Range	Accuracy
Velocity range	0.5 to 199.9 mm/s <sup>2</sup>	
Acceleration range	0.5 to 199.9 m/s <sup>2</sup>	
Calibration point velocity	50mm/s (160 Hz )	
Calibration point acceleration	50m/s <sup>2</sup> (160 Hz )	
Frequency accuracy	160 Hz, 80Hz	±(5% +2)
Frequency Range	10Hz to 1KHz	
Sample Rate	1 second	
Size	185 x 78 x 38mm (meter)	
	16mm dia x 29mm (probe)	
Weight	274g (meter), 38g (probe)	



MT965

## MOISTURE METER

The MT962 Moisture Meter measures moisture level in sawn timber, dry wall partitioning, cardboard, paper, as well as in hardened materials such as plaster, concrete and mortar. The MT962 displays the moisture level immediately on the LCD Bargraph. This meter is ideal for quick reference by the Professional or Handy Man.

### Features

- Measures hardened materials and timber
- Measures moisture levels in sawn timber, dry wall partitioning, cardboard, paper, as well as in hardened materials such as plaster, concrete and mortar
- Integral electrode pins
- Wood measurements 6% - 44%
- Material measurements 0.2% - 2.0%
- Built-in battery check
- Function check for wood display is 27% ± 2%
- Function check for material display is 1.25% ± 0.1%

Function	Range
Measuring Principle	Electrical resistance
Electrode Length	8mm
Electrodes	Integrated, replaceable
Measuring image wood	6% to 44%
Measuring image material	0.2% to 2.0%
Size	139 x 47 x 25mm
Weight	100g



MT962

## MOISTURE METER

The MT960 Moisture Meter is used to measure the moisture level in sawn timber, cardboard, paper, as well as hardened materials such as plaster, concrete and mortar. The MT960 is a conductivity moisture instrument that measures moisture content over the range of 6% to 99.9%. There are two integral electrode pins at the top of the meter for easy one hand operation, supplied with the meter is an extension electrode pin which is ideal when testing in hard to reach locations. Using the temperature probe the readings will be automatically temperature corrected.

Ideal application for surveying buildings for dampness and for rapid determination of the moisture content of wood, chipboard, etc. The meter is microprocessor based and assures maximum possible accuracy.

### Features

- Conductivity moisture meter
- WOOD - measure the moisture level in sawn timber, cardboard & paper
- Display moisture levels of hardened materials such as plaster, concrete & mortar
- Integral electrode pins
- 3 Digit backlit LCD
- 150 Different species of wood material provided
- 8 Calibration scales
- Built-in self calibration circuit
- Temperature measurement 0°C to 50°C (with external probe)

Function	Range
Measuring Principle	Electrical resistance
Electrode Length	8mm
Electrodes	2 pin moisture probes
Measuring image wood	6% to 99.9%
Wood accuracy	±(1%)
Size	180 x 50 x 31mm
Weight	175g



MT960



MT957

## LCR METER

The MT957 LCR meter is battery operated and provides direct and accurate measurements of inductors, capacitors and resistors with different frequencies and is selectable for auto ranging or manual ranging. Convenient front panel push buttons and controls include functions such as data hold, maximum and minimum record mode and relative mode. The 11,000 count LCD display is backlit for easy reading in dark locations.

### Features

- Provides direct and accurate measurements of inductors, capacitors and resistors with different frequencies and is selectable for auto/manual ranging
- 11 000 Count LCD display
- Min / Max
- Relative mode
- Measures inductance to 20H
- Resistance 40MΩ
- Capacitance

Function	Range
Resistance	40MΩ
Capacitance	110.00mF
Inductance	20H
Data Hold	Yes
Min/Max	Yes
Relative mode	Yes
Size	150 x 70 x 48mm
Weight	255g



MT955

## CAPACITANCE METER

This compact and lightweight MT955 capacitance meter offers a wide measuring range for all capacitors from 200pF to 20 000mF. The meter has built-in inputs whereby the capacitors can be inserted directly into the instrument, and for cases where this is not possible due to large capacitors, test leads are supplied.

### Features

- Capacitance to 20mF
- 10pF Resolution
- Automatic polarity indication
- Zero adjustment for low capacitance range
- Easy-to-read 3 1/2 digit 2000 count LCD display
- Low battery indication

Function	Range
Capacitance	200pF to 20mF
Capacitance resolution	10pF
Capacitance accuracy	±(0.5% +1 +0.5pF)
Over range indication	Yes
Size	145 x 69 x 38mm
Weight	190g



MT985

## MILLIOHM METER

The MT985 is a handheld Milliohm/Multimeter combination that measures low resistance from 400mΩ to 40Ω with a resolution of 0.1mΩ and a test current of 200mA. With a two times per second sampling rate, this unit provides fast and accurate measurements on a large high contrast 4000 count LCD Display with a bargraph and back light. The Multimeter function measures AC/DC voltage, AC/DC current, resistance, capacitance, continuity, and includes a diode test offering excellent performance and is ideal for any industry.

### Features

- 4 Terminal Kelvin measurements
- High resolution 0.1mΩ
- Test current of 200mA
- AC 750V / DC 1000V
- AC / DC 400mA
- Capacitance 1pF to 40mF
- MIN / MAX
- Relative mode
- Data Hold
- Continuity
- Diode
- 4000 Count LCD
- Bargraph and backlight
- Low battery indication
- Overload protection

Function	Range	Accuracy
Low Resistance	400MΩ - 40Ω	±(1% +10)
DC Voltage	1000V	±(1.2% +5d)
AC Voltage	750V	±(1.5% +10d)
DC Current	400mA	±(1.0% +2d)
AC Current	400mA	±(1.5% +5d)
Resistance	40MΩ	±(1.0%+4d)
Capacitance	40mF	±(3.0%+10d)
Continuity	Yes	
Data Hold	Yes	
Back Light	Yes	
Bargraph	Yes	
Min Max	Yes	
Size	200 x 92 x 50mm	
Weight	700g	



MT990

## PROCESS CALIBRATOR

The MT990 is a portable instrument used for calibrating process devices and measuring process signals, as well as general purpose signal injection applications. This meter has four modes to provide the quality and accuracy of a bench top calibrator; these include a precision current source up to 24mA, current measurement of current signal, DC mV source and the power and measurement of a two-wire loop. The MT990 ensures correct measurements on mass, volume, length, electricity, flow, pressure, heat and thermal energy. Saves you money by reducing waste due to accurate measurements. Enables smooth production processes.

### Features

- Measuring process signals
- General purpose signal injection applications
- Current loop calibrator
- Load output 0 - 24mA
- Calibrator drives loads to 500Ω
- Adjustable - 199.9mV to +199.9mV DCV source
- Powers or measures a two wire current loop
- 4 Functions - current source, current measurement, DC mV source, power and current measurement of two wire loop

Function	Range	Accuracy
DC Voltage	-199.9mV to 199.9mV	±(0.25%FS +1d)
DC Current	0-24mA	±(0.5%FS +1d)
DC Voltage resolution	0.1mV	
DC Current resolution	0.01mA	
Data Hold	Yes	
Back Light	Yes	
Size	150 x 70 x 40mm	
Weight	232g	



## ACCESSORIES

Test Probes	96
Crocodile Clips	96
Modular Test Lead Sets	97
Silicone Test Leads	97
Test Lead Sets	98
Economy Test Lead Sets	98
Fused Test Leads	98
Insulation Test Leads	98
Distribution Board Test Leads	98
Clamp Meter Test Leads	98
Miscellaneous Test Leads	99
Earth Resistance Test Leads	100
Earth Spikes	100
Clamp Sensors	100
Meter Magnetic Strip	100
Temperature Adaptors	100
Test Lead Light	100
Carrying Cases	101





## POWER CLIP SET



HDT3916

### Features

- Spring wire clip set with flexible insulated shank
- Approximate size 155 x 49mm
- Use with 4mm safety socket test leads HDT3081 and HDT3051
- CAT III 1000V / 5A

## 4mm TEST PROBE SET

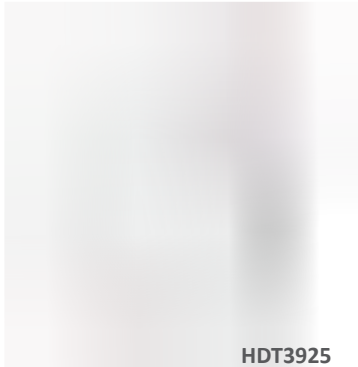


HDT3908

### Features

- 4mm Tips that include banana style spring contacts
- Includes protective cap for PCB testing
- Approximate size 109 x 10mm
- Use with 4mm safety socket test leads HDT3081 and HDT3051
- CAT IV 600V / CAT III 1000V / 10A

## CROCODILE CLIP SET



HDT3925

### Features

- Wide opening grip claw with an insulated shank
- Approximate size 160 x 49mm
- Use with 4mm safety socket test leads HDT3081 and HDT3051
- CAT III 1000V / 10A

## 2mm TEST PROBE SET



HDT3907

### Features

- 2mm Hard tip points for electronic work
- Approximate size 102 x 10mm
- Use with 4mm safety socket test leads HDT3081 and HDT3051
- CAT IV 600V / CAT III 1000V / 10A

## HOOK CLIP SET



HDT3926

### Features

- Hook clamp with an insulated shank
- Approximate size 160 x 49mm
- Use with 4mm safety socket test leads HDT3081 and HDT3051
- CAT III 1000V / 2A

## SHARP TIP PROBE SET



HDT3923

### Features

- Sharp 8mm point tip supplied with protective cap
- Approximate size 100 x 21mm
- Use with 4mm safety socket test leads HDT3081 and HDT3051
- CAT IV 600V / CAT III 1000V / 6A

## CROCODILE CLIP SET



HDT3917

### Features

- Wide opening crocodile clip set with a jaw opening approx 23mm
- Approximate size 94 x 42mm
- Use with 4mm safety socket test leads HDT3081 and HDT3051
- CAT IV 600V / CAT III 1000V / 16A

## CROCODILE CLIP SET



HDT3909

### Features

- Universal crocodile clip set with a jaw opening approx 36mm
- Approximate size 82 x 36mm
- Use with 4mm safety socket test leads HDT3081 and HDT3051
- CAT III 600V / CAT II 1000V / 10A

## CROCODILE CLIP SET



HDT3914

### Features

- Economy crocodile clip set with a jaw opening approx 10mm
- Approximate size 64 x 20mm
- Use with 4mm safety socket test leads HDT1288, HDT1284, HDT3081 and HDT3051 test leads
- CAT III 600V / CAT II 1000V / 10A

# TEST LEADS



## ELECTRONIC TEST SET

### Features

The HDT831 is an Electronic ComfiGrip™ test probe set consisting of:

- HDT3916 electronic probe
- HDT3923 pincer clips
- HDT3081 PVC test leads



HDT831

## UNIVERSAL TEST SET

### Features

The HDT822 is a Universal ComfiGrip™ test probe set consisting of:

- HDT3908 4mm tip probes
- HDT3926 hook clips
- HDT3909 crocodile clips
- HDT3081 PVC test leads



HDT822

## INDUSTRIAL TEST SET

### Features

The HDT821 is an industrial ComfiGrip™ test probe set consisting of:

- HDT3907 2mm tip probes
- HDT3925 crocodile clips
- HDT3081 PVC test leads



HDT821

## SILICONE TEST SET

### Features

- The HDT1288 is a ComfiGrip™ Test Probe set with one red and one black probe, and has silicone insulation and 4mm tips
- Frost flexible and temperature resistant from -40°C to 80°C
- They are recommended for general purpose measurements, and have a length 1m with 4mm safety right-angle test probes
- CAT IV 600V, CAT III 1000V, 10A rating



HDT1288

## COMFIGRIP™ TEST SET

### Features

- The HDT1284 is a ComfiGrip™ Test Probe set with one red and one black probe, and has a PVC insulation and 4mm Tips
- It is recommended for general purpose measurements, the cable length is 1m with 4mm safety right-angle test probes.
- CAT IV 600V, CAT III 1000V, 10A rating



HDT1284

## COMFIGRIP™ TEST SET

### Features

- The HDT1282 is a ComfiGrip™ Test Probe set with one red and one black probe, and has a PVC insulation and 2mm Tips
- It is recommended for general purpose measurements, the cable length is 1m with 4mm safety right-angle test probes
- CAT IV 600V, CAT III 1000V, 10A rating

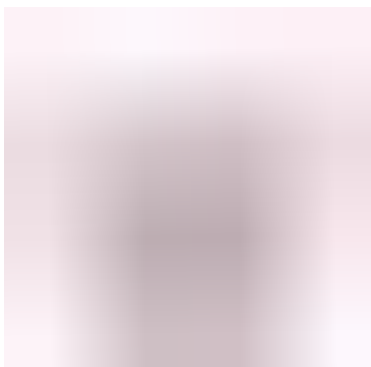


HDT1282

## MODULAR TEST SET

### Features

- The HDT3051 are DMM test leads and have safety shrouds with standard 4mm safety plugs
- Highly flexible PVC insulation 0.8mm² wire
- Straight connector on both ends of the leads, and recommended accessories for HDT3907, HDT3908, HDT3909, HDT3916, HDT3917, HDT3923, HDT3925 and HDT3926
- CAT IV 600V, CAT III 1000V, 10A rating



HDT3051

## MODULAR TEST SET

### Features

- The HDT3081 are DMM test leads and have safety shrouds with standard 4mm safety plugs
- Highly flexible PVC insulation 0.8mm² wire
- Straight connector on one end and a right angled connector on the other end
- Recommended accessories for HDT3907, HDT3908, HDT3909, HDT3916, HDT3917, HDT3923, HDT3925 and HDT3926
- CAT IV 600V, CAT III 1000V, 10A rating



HDT3081

## TEST LEAD SET 2m

### Features

- The MT815 is an economically priced test probe set with one red and one black probe, and has a PVC insulation and 4mm tips
- It is recommended for general purpose measurements, and has 4mm safety right-angle test probes
- Replacement for MT1800 Series IP67 Multimeters
- CAT IV 600V, CAT III 1000V, 10A Rating
- Cable Length 2m

MT815



## TEST LEAD SET 1m

### Features

- The MT810 is an economically priced test probe set with one red and one black probe, and has a PVC insulation and 4mm tips
- It is recommended for general purpose measurements, and has 4mm safety right-angle test probes
- Replacement for MT1800 Series IP67 Multimeters
- CAT IV 600V, CAT III 1000V, 10A Rating
- Cable Length 1m

MT810



## ECONOMY TEST LEAD SET

### Features

- The MT820 is an economically priced test probe set with one red and one black probe, and has a PVC insulation and 4mm tips
- It is recommended for general purpose measurements, and has 4mm safety right-angle test probes
- CAT II 600V, 10A rating

MT820



## ECONOMY TEST LEAD SET

### Features

- Test probes with PVC insulation and 2mm tips
- Design for easy, reliable grip in tight work places
- 4mm safety right angle test probes

MT805



## Fused Test Leads

### Features

- The K7159 are fused test leads fused with a 10A 600V fuse.
- The set comprises of one red and one black probe, and have a PVC insulation and 4mm Tips
- They are recommended for use with multimeters, and have a 4mm safety right-angle test probes
- CAT III 1000V, 10A rating

K7159



## Distribution Board Leads

### Features

- 1500mm Spare distribution board leads for the K6011



K7133



## Insulation Tester Leads

### Features

- 1220mm Spare insulation test leads for the K3131, K3132, K3005, K3007 and K6011

K7122



## Distribution Board Leads

### Features

- 1500mm Spare distribution board leads for the K4118



K7121



## Insulation Tester Leads

### Features

- 1500mm Spare high voltage leads for the K3121, K3122 and K3123

K7058



## Clamp Meters Test Leads

### Features

- 1100mm
- Applicable model: K2007R, K2046R, K2055, K2056R

K7066





## Extension Cable



K7185

### Features

- 3000mm Extension cable
- Applicable for K8121, K8122, K8123, K8124, K8125, K8126, K8127, K8128, K8141, K8142, K8143, K8146, K8147, K8148

## Test Leads

### Features

- Test leads for the K5410
- Ø4mm Terminals



K7128

## Measurement Test Leads

### Features

- 1570mm Simplified measurement test leads for the K4105

K7127

## Earth Probe

### Features

- 1200mm Spare earth cord for the K6011
- Ø4mm Terminals



K7132

## Voltage Test Lead Set



K7141

### Features

- 3000mm Spare line probe for the K3125
- Ø4mm Terminals

## Line Probe



K7165

### Features

- 3000mm Spare line probe for the K3125

## Line Probe with Croc Clip



K7168

### Features

- 3000mm Spare line probe for the K3125

## Test Leads with Remote Switch



K7281

### Features

- 1550mm Test leads with remote control switch for K6516 & K6516BT

## Earth Cord

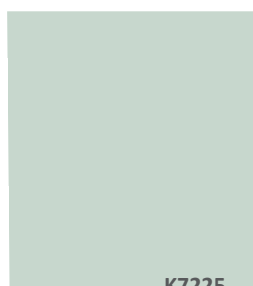


K7224

### Features

- 1500mm Spare earth lead for the K3121, K3122, K3123, K3125, K3127, K3128

## Guard Cord



K7225

### Features

- 1500mm Spare guard cord for the K3121, K3122, K3123, K3125, K3127

## Line Probe



K7226

### Features

- 3000mm Line Probe for the K3128

## Test Leads



K7221

### Features

- Test leads for the K4140
- Ø4mm Terminals

## Earth Resistance Leads



K7095

### Features

- Spare set of leads consisting of a 5m green lead, a 10m yellow lead and a 20m red lead for the K4105

## Earth Spikes



K8032

### Features

- Spare set of earth spikes for the K4105

## Power Cord



K7126

### Features

- 1500mm Spare power cord with a South African plug for the K4118

## CLAMP SENSORS

### Leakage and Current Clamp Sensor



K8141

### Features

- Jaw Ø24mm
- 1000mA AC
- Accessory for : K5020 / K6315

### Leakage and Current Clamp Sensor



K8142

### Features

- Jaw Ø40mm
- 1000mA AC
- Accessory for : K5020 / K6315

### Leakage and Current Clamp Sensor



K8143

### Features

- Ø68mm
- 1000mA AC
- Accessory for : K5020 / K6315

## Magnetic Strip



MTMAG

### Features

- Rubber magnet strip for use on MT500, MT550, MT560, MT330, MT350, MT985 and MT1800 series DMM's

## 15A Socket Adaptor



MT802

### Features

- Temperature Plug adaptor for multimeters and clamp meters.

## Thermocouple Module



MT801

### Features

- Use with most digital multimeters having a standard 4mm input jack and 10MΩ or greater impedance
- All the Major Tech temperature probes can be used with the MT801

## Test Lead Light

### Features

- Fits test leads with a penholder diameter of 8 - 12mm
- Easy to use
- Ideal for dimly lit areas



MT825

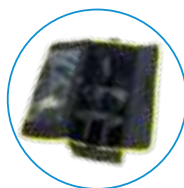
# CARRYING CASES



## HEAVY DUTY METER BAG

### Features

- Optional carrying case to house a range of meters the user needs to carry at one time
- Specially designed by Major Tech to be compact with a shoulder strap
- Adjustable compartments for bigger instruments or tools
- Pocket for instruction manuals or documentation
- Size: 220mm x 450mm x 200mm



*Registered Design*

MTKBAG



## HARD CARRYING CASE FOR THERMOMETERS

### Features

- Hard carrying case with partitions for thermometers
- Partitions include space for a thermometer and temperature probes

MT651



## CARRYING CASE FOR K5020

### Features

- Soft carry bag for the K5020
- Dimensions:  
250(L) x 270(W) x 216(D)mm

K9135



## CARRYING CASE FOR MULTIMETERS

### Features

- Carrying case for most digital multimeters
- Adds extra protection for the meter
- Size: 220mm x 110mm x 60mm

MT827





## Why are CAT IV Meters Needed?



### Voltage spikes (surges) are a constant threat

As electrical distribution systems become more complex the chances of voltage spikes are always increasing. These spikes are superimposed to normal Mains voltage waveform as shown in figure 1.

These voltage spikes are generated by:

- The switching of large loads such as big motors, capacitor banks in power factor correction units, variable speed drivers etc.
- Lightning that strikes a middle / high voltage cable, even if this is kilometers away.

A voltage spike is unpredictable and can be much higher than the maximum rated voltage of our measuring instrument.

Eg. If we are carrying out a Mains voltage measurement in a 230/400V AC distribution line, the spike could reach voltage values of 10 times higher (some 4000 V).

In this case, our safety depends on the protection circuits of our instrument. However its max voltage rating alone (for instance 300 or 600V) gives no indication of the instrument's capability to withstand high voltage spikes. If the instrument is not purposely designed to withstand these high voltage spikes, it will blow and a potential arc blast can create a life-threatening situation for the end user.

Thus the safety of a measuring instrument has to be based on both the max voltage rating and the withstand capability against the over voltage spikes.

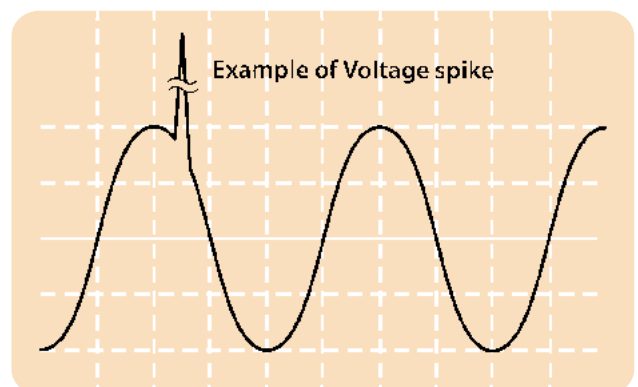
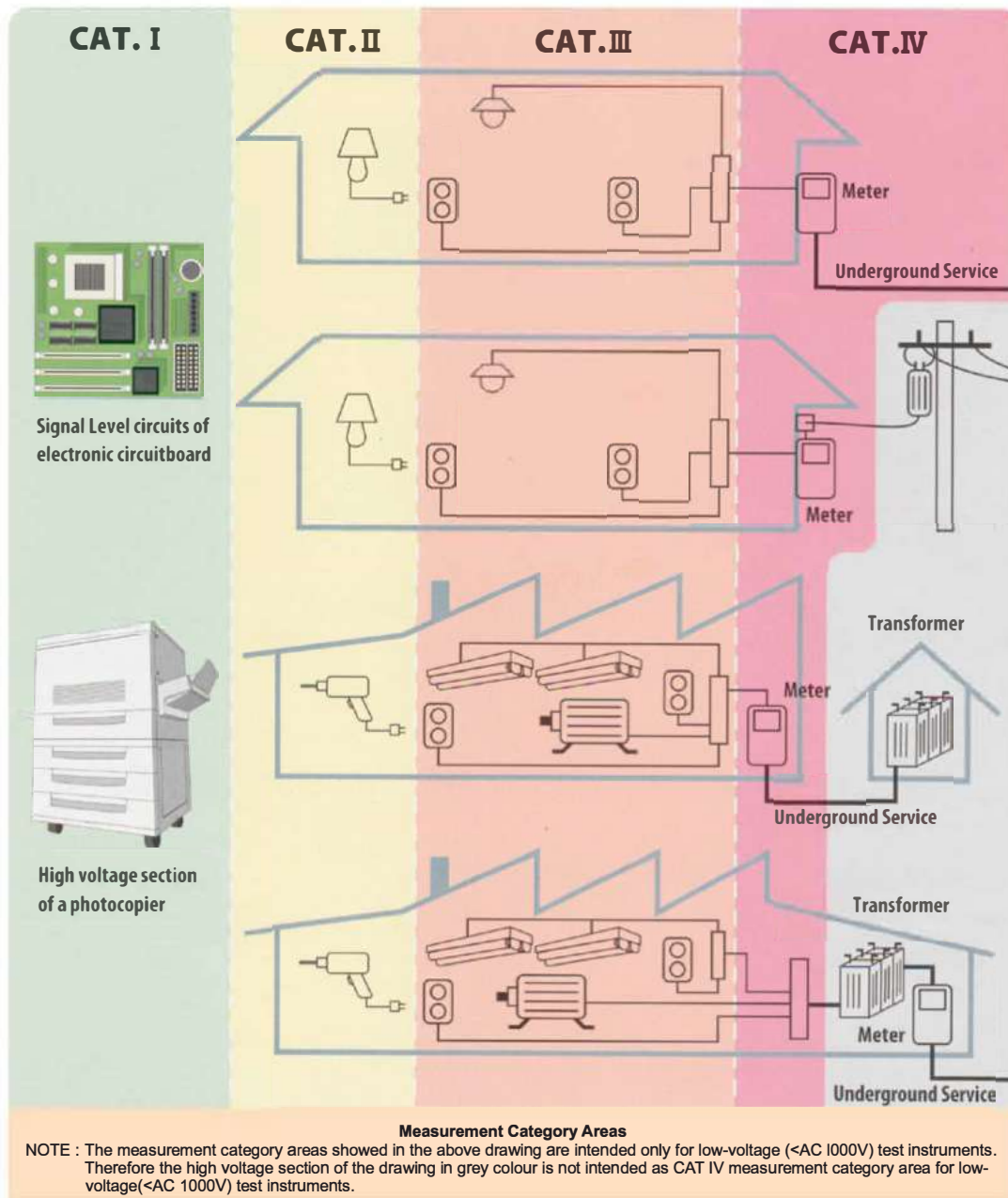


figure 1.

## Standard for Overvoltage - Measurement Categories

To protect us against overvoltage spikes, we must use Instruments that meet the requirements for high protection standards. The IEC (International Electrotechnical Commission) has prepared an International and European safety standard named IEC 61010-1 with the aim of defining the safety requirements for measuring instruments.

In particular IEC 61010-1 standard defines also the safety Measurement areas called Categories, shortly indicated with the abbreviation "CAT". These Categories start from CAT I to CAT IV and the most dangerous one is the CAT IV. The figure below shows some area examples of Measurement Categories.



High voltage spikes are more dangerous at the origin of the installation since a spike is attenuated during its transit through the installation as a result of cable impedance. The categories are thus classified accordingly. So, the closer we are to the power source origin (eg. the secondary side of a

power transformer or the incoming service cable) the higher is the category number and the potential danger from voltage spikes. Therefore an instrument designed for CAT IV, can resist high voltage spikes for CAT IV and for all the lower categories as CAT III, CAT II and CAT I.

## Some Measurement Category Scenarios

### CAT IV

Generally the Measurement Category CAT IV is for measurements to an area at the origin or near the origin of installation.

This area includes:

- An incoming service cable whether it is an underground cable or an overhead line to a detached building.
- The outside and service entrance.
- The service drop from a pole to a building.
- The tails from the power electricity meter to the main protective device (breaker or fuse) or main distribution board.
- The secondary side of Middle Voltage Power Transformer and its main distribution board closed to it.

N.B. instruments designed for CAT IV may also be used in all lower Categories III, II, I and when an even higher degree of reliability and availability is desired.

*Note:*

*An overhead line that supplies a house might be only 230 or 400V but it is still technically CAT IV because any outdoor conductor can be subject to very high energy lightning-related overvoltage spikes.*

*Also incoming underground cables are considered as CAT IV; because although they may not be struck directly by lightning, a nearby lightning strike can generate high electro-magnetic fields that induce overvoltage spikes on the underground cables.*

### CAT III

Generally the Measurement Category CAT III is for measurements performed to an area inside the building installation.

This area includes:

- Equipment in fixed installations such as main switchgear and distribution boards.
- Stationary Motors with permanent connection, Bus-bar, junction boxes and sub main cables in industrial plants.
- Short branch circuits, fuse or circuit-breaker panels and some mains installation control equipment.
- Fix Lighting systems and wiring including cables.
- Three-phase and Single-phase appliance sockets.

N.B. instruments designed for CAT III may also be used in all lower Categories II and I.

### CAT II

Generally the Measurement Category CAT II is for measurements performed on circuits directly connected to the low voltage installation.

Examples are:

- Portable (e.g. driller, hair dryer, table lamp, etc) or fixed (e.g. fridge, water heater, etc) equipment powered via a socket outlet.
- Household appliances, portable tools and similar equipment.

N.B. Instruments designed for CAT II may also be used in Category I area.

### CAT I

Generally the Measurement Category CAT I is for measurements performed to the following examples below.

Examples are:

- Equipment intended to be connected to a Mains supply in which means have been taken to substantially and reliably reduce overvoltage spikes to a level where they cannot be a hazard.
- Any high-voltage (but with low-energy source) derived from a highwinding resistance transformer, such as the high-voltage section of a photocopier.
- Signal level circuits for telecommunications and electronic equipment.

*Note:*

*Inside a photocopier (or other appliances like TVs, Monitors, Pc's, etc. that fall within typical CAT I area) we could actually find some DC voltages much higher than the Mains voltage of 230V / 400V AC measured on a large motor typically classified as a CAT III area.*

*However the spikes in a CAT I electronic circuitry, whatever the voltage, are clearly of a lesser threat than ones we can find on a CAT III area, as the energy available to form an arc is limited. This does not mean that there is no electrical hazard present in CAT I equipment.*

What should be done in similar situations? It is not reasonable to study and define the right category before each and every measurement. So it is always recommended to select an instrument with a rated category and voltage sufficient to cater for the worst case scenario.

## Some Measurement Category Scenarios

In some cases it is difficult to classify the correct category as the same equipment could contain more than one category.

Examples:

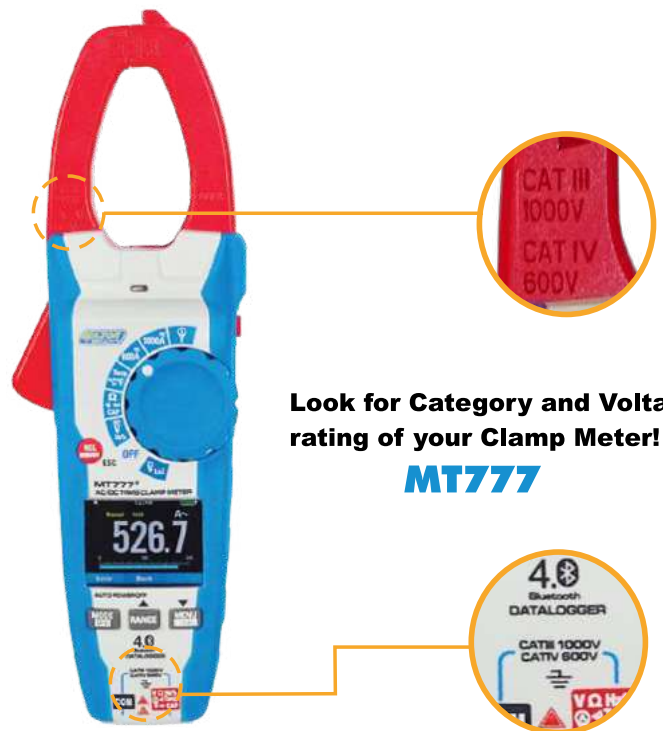
- In electronic equipment like a photocopier, TV, monitor etc, there is often more than one category. For instance, in a photocopier; from the 230V side of the power supply back to the socket out-let is CAT II. But its electronic circuitry is CAT I.
- In building control systems, such as lighting control panels, or industrial control equipment such as PLCs, programmable controllers it is possible to find electronic circuits (CAT I) together with power circuits (CAT III).

## Safety first is the right choice!

Before purchasing a new Clamp Meter, we strongly recommend to consider the worst case scenario you might come across in your job and then determine which category is needed.

So first choose a Clamp Meter designed for the highest category you could be working in. Then, look for a Clamp Meter with a voltage rating and the category matching your needs.

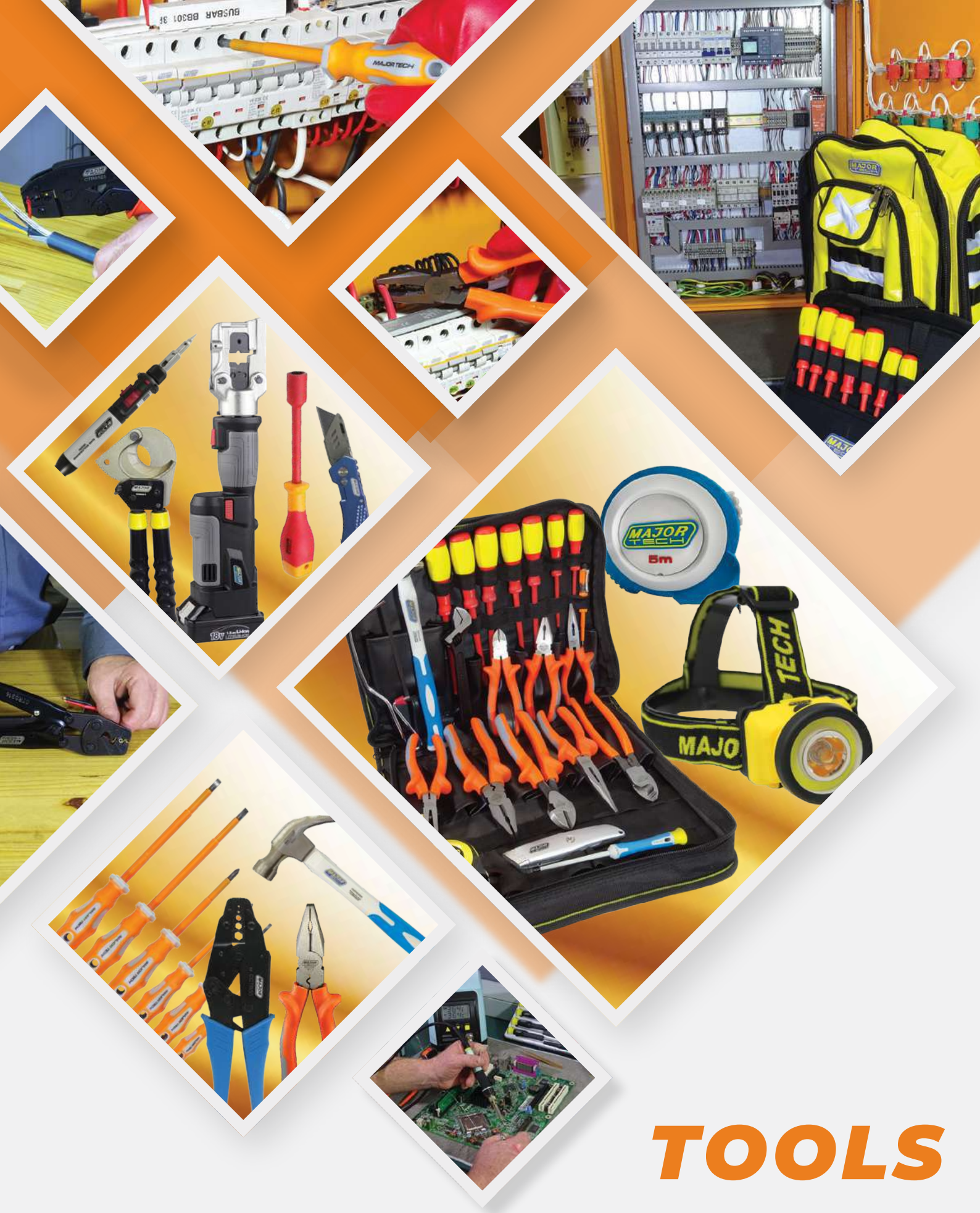
The modern clamp meters designed to meet the IEC 61010-1 must clearly mark all the Category information and the max voltage rating. See the example shown in the picture:



**Look for Category and Voltage rating of your Clamp Meter!**

**MT777**





# ***TOOLS SECTION***





# 1000V Certified Tools

The new and improved range of Major Tech's ever popular Pliers and Cutters are fully certified safe **1000V CHROME VANADIUM** working tools, and feature the highest quality design ensuring safety and comfort for all day working.

The highest quality pivots carefully machined for minimum play with easy one hand operation.

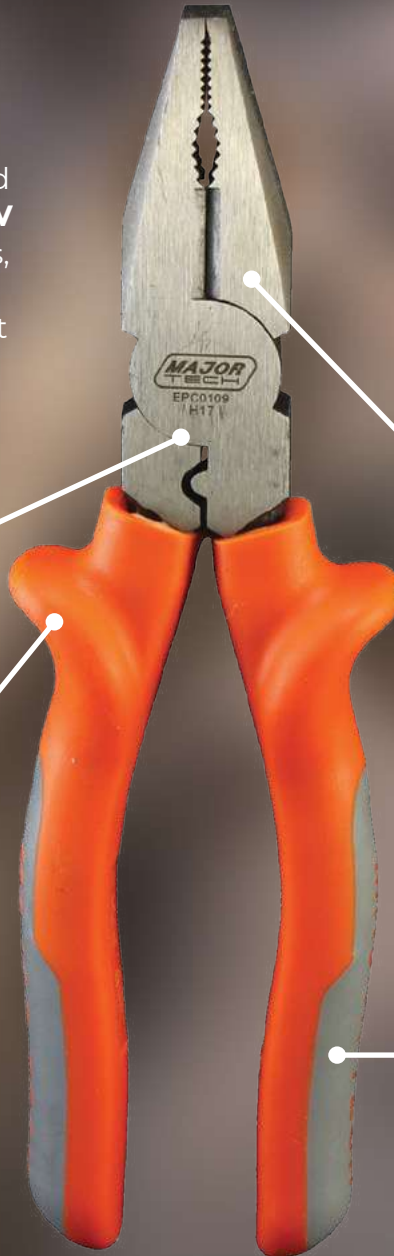
High comfort hand guards stop hand slipping onto live conductors.



For the same price as ordinary tools

High quality 50CRV chrome vanadium with polished finish, HRC of blade 63#.

Composite TPE handles are designed for non-slip safety, superb control and comfort in the hand.



CS0340



EP0106



LP0108



DP0106



DP0108



SP1006



LP0106

Major Tech was the first to introduce 1000V tools in 1988, and our ever popular 1000V pliers and cutters have evolved over the years. We recently introduced the fourth edition of these pliers and cutters which now feature composite TPE handles as well as Chrome Vanadium to the complete range. Major Tech has over the years developed tools for electricians, making tasks easier with the correct tools and ensuring comfort for daily use. The Major Tech tools are a firm favourite with electricians and many insist on only using our tools.

The success of Major Tech tools over the history of the company has allowed us the opportunity to bring to market different concepts and ideas. Major Tech was one of the first to introduce tool kits to meet customer's requirements depending on their environment.

The TBP5 backpack with its waterproof and oil resistant rubber base was developed for the mining industry as this allowed the electrician to place the bag in any wet surface and not effect or wet the tools. The reflective tape on the back was for safety visual reasons. Newly introduced is the TBP7 which is similar to the TBP5 but made of a strong bright yellow tarpaulin material.

The comprehensive range of major Tech tools include crimping tools – ratchet type and hydraulic versions, cable shears, tape measures and hammers. There is also a full range of VDE approved tools which include hacksaws, spanners and utility knives. Our electronic section offers Data tools plus gas soldering irons and electronic pliers and cutters. Where one needs to make holes, Major Tech offer a wide range of options from Bi-Metal holesaws to HSS holesaws and tungsten carbide holesaws, plus we stock step drills and sheet metal punches. Our KTK0707SG is our most popular 1000V screwdriver set, however we have a variety of other screwdrivers and screwdriver sets to meet electrician's requirements.

The demand for electricians working on their own created an opportunity for Major Tech to introduce LED headlamps, torches and worklights, thus improving visual light in dark areas. The worklights have magnets and swivel hooks for easy and simple assistance.



## TOOLS CONTENT

Economy Pliers Range	108
1000V Pliers Range	109
1000V VDE EN60900 Range	110
Screwdrivers & Sets	116
2-Way Radio & FM Receiver	118
Hammers	119
Crimping Tools	120
Battery Powered Crimping Tools	123
Hydraulic Crimping Tools	124
Cable Shears	126
Hex Keys	128
Wire Strippers	128
Socket Sets & Spanners	130
Groove Joint Pliers	131
Locking Pliers	131
Adjustable Spanners	131
Nut Driver Set	131
Hacksaws	132
Utility Knives	132
Tape Measures & Calliper	133
Spirit Levels	133
Universal Keys	133
Holesaws	134
Diamond Cutting Blades	134
Step Drills	134
Arbors & Pilot Drills	135
Tap & Die Set	136
Fish Tapes	136
Chalk & Chalk Lines	136
Soldering Irons & Accessories	137
Punch Down Tools & Accessories	139
Electronic Pliers & Tweezers	140
LED Headlights & Work Lights	141
LED Flashlights	142
Tool Kits	143
Tool Bags	146





EPC230



EP200



EP160

## COMBINATION PLIERS

### Features

- Guaranteed cutting edge hardness
- Suitable for both hard & soft wire
- 55# Carbon steel
- Heavy duty ergonomical handgrips
- EPC230 includes a crimp slot
- Heavy duty insulation

Product Code	Length	Head	Handle
EPC230	220mm	60mm	140mm
EP200	200mm	55mm	135mm
EP160	165mm	45mm	108mm



DP200



DP160

## DIAGONAL CUTTERS

### Features

- Guaranteed cutting edge hardness
- Suitable for both hard & soft wire
- 55# Carbon steel
- Heavy duty ergonomical handgrips
- Heavy duty insulation

Product Code	Length	Head	Handle
DP200	200mm	40mm	177mm
DP160	165mm	33mm	120mm



LP200



LP160

## LONG NOSE PLIERS

### Features

- Guaranteed cutting edge hardness
- Suitable for both hard & soft wire
- 55# Carbon steel
- Ideal for working in confined spaces
- Heavy duty insulation

Product Code	Length	Head	Handle
LP200	200mm	90mm	105mm
LP160	165mm	60mm	98mm



SP160

## STRIPPING PLIERS

### Features

- Spring assist opening
- Strips cable size 0.3mm<sup>2</sup> to 6.0mm<sup>2</sup>
- Suitable for both hard & soft wire
- 55# Carbon steel
- Heavy duty insulation
- Easy to adjust stop with locking nut

Product Code	Length	Head	Handle
SP160	160mm	44mm	118mm



CTR240

## CRIMPING PLIERS

### Features

- 55# Carbon steel
- Heavy duty insulation
- Crimps cable size 0.5mm<sup>2</sup> to 6mm<sup>2</sup>
- Easy indent crimping and cutting

Product Code	Length	Head	Handle
CTR240	240mm	38mm	130mm

# 1000V PLIERS RANGE

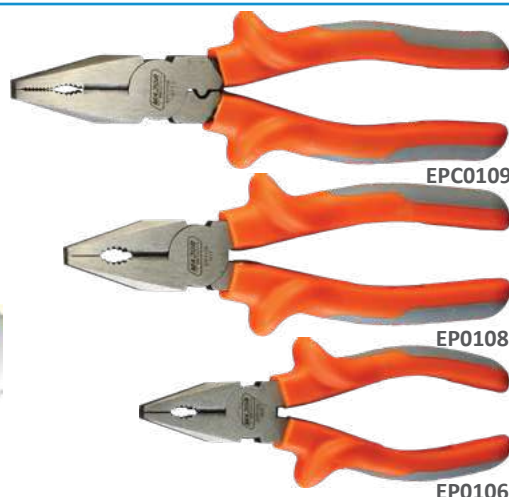


## ELECTRICIAN PLIERS

### Features

- Guaranteed cutting edge hardness
- HRC 58-63 suitable for both hard & soft wire
- Quality 50CRV Chrome Vanadium
- Individually tested to 10 000V
- Heavy duty TPE rubber insulated handle grips
- 1000V Safe
- EPC0109: Includes a crimp slot

Product Code	Length	Head	Handle
EPC0109	230mm	55mm	170mm
EP0108	200mm	53mm	150mm
EP0106	165mm	45mm	120mm



EPC0109

EP0108

EP0106

## DIAGONAL CUTTERS

### Features

- Guaranteed cutting edge hardness
- HRC 58-63 suitable for both hard & soft wire
- Quality 50CRV Chrome Vanadium
- Individually tested to 10 000V
- Heavy duty TPE rubber insulated handle grips
- 1000V Safe

Product Code	Length	Head	Handle
DP0108	200mm	40mm	177mm
DP0106	165mm	33mm	132mm



DP0108

DP0106

## LONG NOSE PLIERS

### Features

- Guaranteed cutting edge hardness
- HRC 58-63 suitable for both hard & soft wire
- Quality 50CRV Chrome Vanadium
- Individually tested to 10 000V
- Heavy duty TPE rubber insulated handle grips
- Ideal for working in confined spaces
- 1000V Safe

Product Code	Length	Head	Handle
LP0108	200mm	90mm	115mm
LP0106	165mm	60mm	110mm



LP0108

LP0106

## STRIPPING PLIERS

### Features

- Quality 50CRV Chrome Vanadium
- Spring assist opening
- Easy to adjust stop with locking nut
- Strips cable 0,3mm<sup>2</sup> - 6,0mm<sup>2</sup>
- Heavy duty 1000V TPE handles
- Individually tested to 10 000V
- 1000V Safe

Product Code	Length	Head	Handle
SP1006	160mm	44mm	124mm



SP1006

## CABLE SHEAR

### Features

- Quality 50CRV Chrome Vanadium
- 38mm<sup>2</sup> Max cross section
- 7mm Max cable diameter
- Heavy duty 1000V TPE handles
- Individually tested to 10 000V
- 1000V Safe

Product Code	Length	Head	Handle
CS0340	215mm	75mm	110mm



CS0340



KTIN0513

## METRIC NUT SCREWDRIVER SET

### Features

- 6 Piece
- Conforms to EN 60900 standards
- Speciallt designed as a nut driver with a tube
- Fully insulated for heavy duty for professional use up to 1000V AC
- New soft grip handles for maximum torque



Product Code	Length	Shaft	Head
KTIN0513	225mm	155mm	5mm
	260mm	150mm	6mm
	260mm	150mm	7mm
	270mm	150mm	8mm
	270mm	150mm	10mm
	270mm	150mm	13mm



## METRIC NUT SCREWDRIVERS

### Features

- Conforms to EN 60900 standards
- For use on or near electrical systems generating up to 1000V
- Reinforced Polypropylene handles for comfort and durability

Product Code	Head	A	B	E	CxD	L
KTIN0205	5	7.2	125	31	105x30	230
KTIN0207	7	7.2	125	31	105x30	230
KTIN0208	8	7.2	125	31	105x30	230
KTIN0210	10	7.2	125	31	105x30	230
KTIN0211	11	8.1	125	31	118x41	240
KTIN0212	12	8.1	125	31	118x41	243
KTIN0213	13	8.1	125	31	118x41	243
KTIN0214	14	8.1	125	31	118x41	243

\*Sizes in mm



VRA125



## REVERSABLE RATCHET SPANNER

### Features

- Fully insulated for use on live conductors up to 1000V AC
- ½ Inch size (12.7mm)
- Conforms to EN 60900 standards
- Ratchet reverse
- Socket unlock button
- Individually tested to 10 000V

Product Code	Size	Length
VRA125	1/2"	250



VTH125

## 1/2" T-HANDLE

### Features

- Fully insulated for use on live conductors up to 1000V AC
- ½ Inch size (12.7mm)
- Conforms to EN 60900 standards
- T-Handle
- Individually tested to 10 000V

Product Code	Size	H	L
VTH125	1/2"	155mm	205mm



## RATCHET EXTENSION BARS

### Features

- ½ Inch size (12.7mm)
- Conforms to IEC 60900 standards
- Individually tested to 10 000V

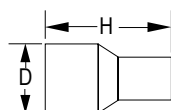
Product Code		mm
VEB125	1/2"	125
VEB250	1/2"	250




## INSULATED SOCKETS

### Features

- Fully insulated for use on live conductors up to 1000V AC
- Individually tested to 10 000V
- Chrome vanadium
- Conforms to EN 60900 standard
- Metric



Product Code		D	H
VSS10	10	19.7	54
VSS11	11	21.0	54
VSS12	12	22.1	54
VSS13	13	23.3	54
VSS14	14	24.7	54
VSS16	16	27.4	54
VSS17	17	28.1	54
VSS18	18	29.7	54
VSS19	19	30.0	54
VSS21	21	32.0	54
VSS22	22	34.0	54


\*Sizes in mm



## L-WRENCH HEX KEYS

### Features

- Fully insulated for use on live conductors up to 1000V AC
- Conforms to EN 60900 standards
- Chrome vanadium steel
- Individually tested to 10 000V

Product Code		mm
VB03	3	130
VB04	4	140
VB05	5	160
VB06	6	180
VB08	8	210
VB10	10	240

\*Sizes in mm



## ADJUSTABLE SPANNERS

### Features

- Chrome vanadium steel
- Individually tested to 10 000V
- High quality spanner that adjusts to suit various sizes of bolt and nut heads
- Useful when only a limited number of tools can be carried or kept in a tool kit
- Conforms to EN 60900 standards



Product Code	mm	
VAS0108	200	30
VAS0110	250	36

\*Sizes in mm

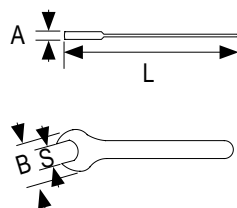




## SINGLE OPEN ENDED

### Features

- Fully insulated for use on live conduits up to 1000V AC
- High quality open end spanner
- Unique design drives metric sizes
- Chrome vanadium steel
- Angled 15 degrees
- Conforms to EN60900 standards
- Individually tested to 10 000V



Product Code	⊗	A	B	L
VOSP07	7	7.5	20	90
VOSP08	8	8	22	90
VOSP10	10	9	26	105
VOSP11	11	9.5	29	110
VOSP12	12	10	32	125
VOSP13	13	10	33	135
VOSP14	14	11	35	140
VOSP15	15	11	38	150
VOSP16	16	12	40	160
VOSP17	17	12	42	160
VOSP18	18	12	44	165
VOSP19	19	13	45	170
VOSP21	21	14	48	188
VOSP22	22	14	52	200
VOSP24	24	15	55	225

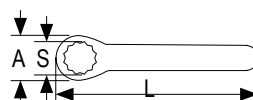
\*Sizes in mm



## RING GEAR WRENCH

### Features

- Fully insulated for use on live conductors up to 1000V AC
- Conforms to EN 60900 standards
- Individually tested to 10 000V
- Chrome vanadium steel
- Unique design drives metric sizes
- 72 Teeth



Product Code	⊗	A	L
VRRS10	10	29.5	150
VRRS11	11	32	160
VRRS12	12	34.5	165
VRRS13	13	34.5	170
VRRS14	14	37.5	180
VRRS17	17	38	180
VRRS19	19	40	200

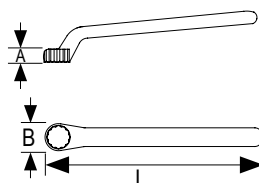
\*Sizes in mm



## RING WRENCH

### Features

- Fully insulated for use on live conductors up to 1000V AC
- Conforms to EN 60900 standards
- Individually tested to 10 000V
- Chrome vanadium steel
- Unique design drives metric sizes



Product Code	⊗	A	B	L
VRSP07	7	10.5	17	150
VRSP08	8	12	19	155
VRSP09	9	12	20.5	160
VRSP10	10	12	20.5	165
VRSP11	11	12	23	175
VRSP12	12	12	24	185
VRSP13	13	13	26	190
VRSP14	14	13	27	200
VRSP15	15	13	29	205
VRSP16	16	14	30	205
VRSP17	17	14.5	32	210
VRSP18	18	14.5	33	220
VRSP19	19	14.5	35	230
VRSP21	21	16	38	240

\*Sizes in mm

## PROFESSIONAL HACKSAW

### Features

- Heavy, ergonomical, professional metal hacksaw
- Conforms to IEC 60900 standard
- Non-slipping two component safety soft handle
- Individually tested to 10 000V

Product Code	Length	Blade
VHSL0112	460mm	300mm



VHSL0112

## JUNIOR HACKSAW

### Features

- Ideal for cutting small delicate pieces of electrical material where the weight alone of the standard hacksaw may cause damage to the workpiece
- Easier to use in confined spaces
- Conforms to IEC 60900 standard
- Individually tested to 10 000V

Product Code	Length	Handle	Blade
VHSJ0106	270mm	110mm	150mm



VHSJ0106

## CABLE SHEAR

### Features

- 50mm Width blades
- 38mm Max cross section
- 7mm Max diameter cable
- Compact, one handed cable shear, cuts cleanly & effortlessly
- Conforms to IEC 60900 standard
- Note: Not suitable for cutting steel wire armoured cables

Product Code	Length	Weight	Blade Width
VCSS0108	210mm	360g	50mm



VCSS0108

## 1000V STRIPPING KNIVES

### Features

- VSKN011S: Fixed straight blade
- VSKN012C: Fixed curved blade
- VSKN013S: Fixed curved blade with safety shoe to prevent damage to inner conductors
- Insulated for use on live conductors up to 1000V AC
- Strong comfortable shaped safety handle
- Complete with protective cap for storage
- Stainless steel

Product Code	Length	Blade
VSKN011S	180mm	50mm
VSKN012C	155mm	28mm
VSKN013S	155mm	38mm



VSKN011S

VSKN012C

VSKN013S





KV-7RSP

## INSULATED SPANNER SET

### Features

- 7 Piece Set
- Insulated Injection Open End Spanners
- Sizes: 8mm, 10mm, 12mm, 13mm, 14mm, 17mm, 19mm

Product Code	mm
KV-7RSP	8, 10, 12, 13, 14, 17, 19



KV-10SS

## INSULATED SOCKET SET

### Features

- 10 Piece Set
- ½" Insulated T-Handle Wrench
- ½" Insulated Sockets
- Sizes: 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm

Product Code	Handle	mm
KV-10SS	200	10, 11, 12, 13, 14, 15, 16, 17, 18, 19



KV-9SS

## INSULATED SOCKET SET

### Features

- 9 Piece Set
- ½" Insulated Reversible Ratched Handle
- ½" Insulated 125mm Extension Bar
- ½" Insulated Sockets
- Sizes: 10mm, 12mm, 13mm, 14mm, 15mm, 17mm, 19mm

Product Code	Handle	mm
KV-9SS	200	10, 12, 13, 14, 15, 17, 19



KV-5RRS

## INSULATED RATCHET RING SPANNER SET

### Features

- 5 Piece Set
- Insulated Ratchet Ring Spanners
- Sizes: 10mm, 12mm, 13mm, 14mm, 17mm

Product Code	mm
KV-5RRS	10, 12, 13, 14, 17



KV-5RSP

## INSULATED RING SPANNER SET

### Features

- 5 Piece Set
- Insulated Ring Spanners
- Sizes: 10mm, 12mm, 13mm, 14mm, 17mm

Product Code	mm
KV-5RSP	10, 12, 13, 14, 17



## 1000V TOOL KIT

KV3-28

### Kit includes

- KTK0306 1000V Insulated Screwdriver Set
- VSKN0115: Fixed straight blade
- VSKN0135: Fixed curved blade
- EPC0109: 225mm Combination Pliers
- DP0108: 210mm Diagonal Cutting Pliers
- LP0108: Long Nose Pliers
- KV-7RSP: 7 Piece Insulated Spanner Set
- KV-9SS: 9 Piece Insulated Socket Set
- VTH125: 1/2" T-Handle
- TKC3: Large Zipper Case

■ Ideal for Solar Installations



KTK0306  
Pg 117

LP0108  
Pg 109

DP0108  
Pg 109

EPC0109  
Pg 109



VSKN0115 & VSKN0135  
Pg 113



VTH125  
Pg 110

### Optional:



MT405EX  
Pg 62



TKC3  
Pg 146



KV-7RSP  
Pg 114



KV-9SS  
Pg 114

## PROFESSIONAL 1000V TOOL KIT

KV7-38

### Kit includes

- KTK0306 1000V Insulated Screwdriver Set
- VSKN0115: Fixed straight blade
- VSKN0135: Fixed curved blade
- EPC0109: 225mm Combination Pliers
- DP0108: 210mm Diagonal Cutting Pliers
- LP0108: Long Nose Pliers
- KV-7RSP: 7 Piece Insulated Spanner Set
- KV-9SS: 9 Piece Insulated Socket Set
- VEB250: Ratchet Extension Bars
- VTH125: 1/2" T-Handle
- VAS0110: 110mm Adjustable Spanner
- VB03: 3mm L-Wrench Hex Keys
- VB04: 4mm L-Wrench Hex Keys
- VB05: 5mm L-Wrench Hex Keys
- VB06: 6mm L-Wrench Hex Keys
- VB08: 8mm L-Wrench Hex Keys
- VB10: 10mm L-Wrench Hex Keys
- VHSL0112: Professional Hacksaw
- TBP7: Toolbag Backpack

■ Ideal for Solar Installations

### Optional:



KV-5RRS  
Pg 114



KV-5RSP  
Pg 114



MT405EX  
Pg 62



TBP7  
Pg 146



VAS0110  
Pg 111



VHSL0112  
Pg 113



VTH125  
Pg 110



VEB250  
Pg 111



VSKN0115 & VSKN0135  
Pg 113



VB Range  
Pg 111



KTK0306  
Pg 117



LP0108  
Pg 109



DP0108  
Pg 109



EPC0109  
Pg 109



KV-7RSP  
Pg 114



KV-9SS  
Pg 114



KTE0206

## ENGINEERS SCREWDRIVER SET

### Features

- 7 Piece
- Dropped forged chrome vanadium steel with hardened tips
- Corrosion resistant tips
- Magnetic tips
- Ideal for electrical or mechanical use

Product Code	Length	Blade	Tip
KTE0206	205mm	100mm	PH2
	175mm	80mm	PH1
	170mm	75mm	PH0
	255mm	150mm	6.5mm
	215mm	125mm	5.5mm
	190mm	100mm	4mm
	170mm	75mm	3.5mm



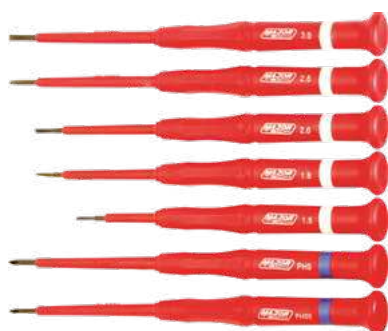
KTE0308

## ENGINEERS SCREWDRIVER SET

### Features

- 8 Piece
- Chrome vanadium construction
- Hardened precision tips
- Magnetic tips hold screws securely
- Soft material handles offer great torque and comfort for jobs
- Variety of handle sizes and tips to accommodate a number of fastening projects

Product Code	Length	Blade	Tip
KTE0308	210mm	100mm	PH2
	170mm	75mm	PH1
	103mm	38mm	PH2
	275mm	150mm	8mm
	210mm	100mm	6.5mm
	195mm	100mm	5mm
	145mm	75mm	3mm
	103mm	38mm	6.5mm



KTKTSD07

## ELECTRONIC SCREWDRIVER SET

### Features

- 7 Piece
- Fully insulated 1000V
- Chrome Vanadium
- Ideal for electronic use, swivel tops and fast fixing screws



Product Code	Length	Blade	Tip
KTKTSD07	175mm	75mm	PH00
	175mm	75mm	PH0
	140mm	40mm	1.5mm
	160mm	65mm	1.8mm
	160mm	65mm	2mm
	175mm	75mm	2.5mm
	175mm	75mm	3mm



KTPS0208

## PRECISION SCREWDRIVER SET

### Features

- 8 Piece
- Chrome Vanadium construction
- Ideal for all electronics industry use with hardened tips
- Supplied in a plastic carrying case
- Nickel chrome molybdenum steel blades with hardened tips
- Swivel tops aid fast fixing of screws

Product Code	Length	Blade	Tip
KTPS0208	168mm	75mm	3mm
	168mm	75mm	3.5mm
	168mm	75mm	P1
	155mm	75mm	2mm
	155mm	75mm	2.5mm
	168mm	75mm	4mm
	155mm	75mm	P0
	168mm	75mm	P2





1000V INSULATED SCREWDRIVER SET

Features

- 6 Piece
- Fully insulated for heavy duty professional use up to 1000V AC working to EN60900
- Dropped forged chrome vanadium steel with hardened tips
- Corrosion resistant tips
- Magnetic Tips



Product Code	Length	Blade	Tip
KTK0306	205mm	100mm	PH2
	190mm	100mm	PH1
	250mm	150mm	6mm
	225mm	125mm	5mm
	190mm	100mm	4mm
	145mm	75mm	3mm



KTK0306

1000V INSULATED SCREWDRIVER SET

Features

- 7 Piece
- Fully insulated for heavy duty for professional use up to 1000V AC working to EN60900
- IEC Stepped Insulation for greatly improved terminal access
- Drop forged Chrome Vanadium Steel with hardened tips

Product Code	Length	Blade	Tip
KTK0707SG	235mm	125mm	No 2
	230mm	125mm	No 1
	260mm	150mm	8mm
	260mm	145mm	6mm
	230mm	125mm	5mm
	200mm	100mm	4mm
	180mm	75mm	3mm



KTK0707SG

HEAVY DUTY 1000V SCREWDRIVER SET

Features

- 8 Piece
- Fully insulated for heavy duty for professional use up to 1000V AC working to EN60900
- Corrosion resistant tips
- Made from Chrome vanadium Steel
- IEC Stepped Insulation for greatly improved terminal access
- Designed for comfort with recessed fingerstops to prevent slipping
- New soft grip handles for maximum torque

Product Code	Length	Blade	Tip
KTK0408	240mm	125mm	No 2
	205mm	100mm	No 1
	300mm	175mm	8mm
	270mm	150mm	6mm
	230mm	125mm	5mm
	225mm	125mm	4mm
	185mm	100mm	3mm
NEON	140mm	100mm	3mm



KTK0408

## NEON SCREWDRIVERS

### Features

- Detects voltage from 110V - 250V AC
- Electrical orange colour for high visibility
- Long life neon light
- Ideal to test mains circuits to see if they are live
- Tough all moulded construction & sealed for safety



VNS1407



VNS1410

Product Code	Length	Blade	Tip
VNS1407	140mm	65mm	3mm
VNS1410	190mm	100mm	3.5mm

## TERMINAL SCREWDRIVERS

### Features

- High quality special alloy chrome vanadium blade
- Clear colour coded top for slot/crosshead
- Ultra comfort swivel top gives speed and control
- Thin sleeve protected blade gives excellent access



TSD0320S



TSD0320P

Product Code	Length	Blade	Tip
TSD0320S	195mm	100mm	3.5mm
TSD0320P	195mm	100mm	PZ2

## STUBBY SCREWDRIVERS

### Features

- Perfect for hard to reach areas
- Tough, chrome vanadium steel shank
- Comfortable grip
- KTES0406: Flat stubby
- KTEP04P2: Philips P2 stubby



KTES0406



KTEP04P2

Product Code	Length	Blade	Tip
KTES0406	100mm	40mm	6mm
KTEP04P2	100mm	40mm	P2

## TERMINAL SCREWDRIVER

### Features

- Terminal screws with recessed heads
- Fully insulated for 1000V working to EN 60900
- Ideal for circuit breakers



TSD0407

Product Code	Length	Blade	Tip
TSD0407	150mm	100mm	6mm



## 2-WAY RADIO & FM RECEIVER

### Features

- 199 Channels
- VOX Hands Free
- DCS and CTCSS Indica
- FM Radio Receiver
- 5, 7 and 9 Transmitter power indicator
- LCD Display with 7 Backlit Colours
- 34 Menu Options
- Sold as individual units - units can be cloned with one another via the MTD90CC (optional cloning cord)
- Channel Spacing Setup Black
- Roger Tone
- Call Tone
- Time Out Timer (TOT)
- Narrow/Wide Bandwidth Selective
- Squelch Level Setup
- Frequency Reverse
- Scrambler
- Busy Channel Lock-Out (BCLO)
- Emergency Channel
- Keypad Locker



LCD Display with 7 Backlit Colours



199 Channels



MTD90



Product Code	Length	Width	Height
MTD90	114mm	57mm	38mm

# HAMMERS



## BALL PEIN HAMMER

### Features

- Dropped forged 100g steel head
- Mirror polished finish
- Shock absorbing rubber grip
- Balanced head
- Fibreglass handle for maximum strength

Product Code	Length	Head
HP0335	285mm	Ball Pein



HP0335

## BALL PEIN HAMMER

### Features

- Dropped forged 450g carbon steel head
- Shock absorbing rubber grip
- Balanced head
- Mirror polish finish
- Fibreglass handle for maximum strength

Product Code	Length	Head
HDP0316	330mm	Ball Pein



HDP0316

## CLAW HAMMER

### Features

- Dropped forged 500g carbon steel head
- Shock absorbing rubber grip
- Mirror polish finish
- Fibreglass handle for maximum strength

Product Code	Length	Head
HDP0320	350mm	Claw



HDP0320

## STEEL CLAW HAMMER

### Features

- 450g carbon steel head
- One piece carbon steel for professional quality
- Accurate machined claw with fine gripping edges to prevent splintering
- Balanced head zone tempered for safety
- Finely polished one piece steel shaft and head
- Heavy duty, shock absorbing rubber grip on handle

Product Code	Length	Head
HDS0316	330mm	Claw



HDS0316

## CLUB HAMMER

### Features

- Head to shaft reinforcement for maximum strength and safety
- Dropped forged 1.25kg steel head
- Head construction to DIN 6475
- Fibreglass handle for maximum strength

Product Code	Length	Head
HDC0610	285mm	Club



HDC0610





CCTR50

## BNC RATCHET CRIMPING TOOL

### Features

- Crimp tool for coax terminals from 1.72mm<sup>2</sup> to 8.2mm<sup>2</sup>
- Easy to adjust pre-set crimp pressure
- Suitable for left or right hand operation
- Automatic release with manual override
- Professional quality drop forged jaws
- Full ratchet mechanism with pressure adjustment
- **Terminal sizes:**  
1.72mm<sup>2</sup>; 2.5mm<sup>2</sup>; 5.4mm<sup>2</sup>; 6.48mm<sup>2</sup>; 8.2mm<sup>2</sup>

Product Code	Length	Head	Handle
CCTR50	240mm	50mm	150mm



KDBNC01

## BNC RATCHET CRIMPING TOOL

### Features

- Ratchet BNC crimping tool
- Hexagonal crimping type
- Comfort grip handles
- For RG58, RG59 and RG62 ethernet cables
- Ratchet mechanism for maximum grip
- Professional quality drop forged jaws
- Automatic release with manual override

Product Code	Length	Head	Handle
KDBNC01	225mm	35mm	120mm



CTR156

## HEX CRIMPING TOOL

### Features

- Crimp tool for hexagon terminals from 1.5mm<sup>2</sup> to 6.0mm<sup>2</sup>
- Ratchet mechanism for maximum grip
- Professional quality drop forged jaws
- Automatic release with manual override
- **Terminal sizes:**  
1.5mm<sup>2</sup>; 2.5mm<sup>2</sup>; 4.0mm<sup>2</sup>; 6.0mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR156	220mm	35mm	150mm

■ Non-Insulated Terminals



CTR0510

## BOOTLACE FERRULE CRIMPING TOOL

### Features

- Fully ratchet mechanism with combined calibrator assembly to comply with BS 5750 and ISO 9000 standard requirements
- Crimp tool for coax terminals
- Ratchet crimping tool for cord end (bootlace) from 0.5mm<sup>2</sup> to 6.0mm<sup>2</sup>
- Flexibility to crimp
- **Terminal sizes:**  
0.5mm<sup>2</sup>; 0.75mm<sup>2</sup>; 1.0mm<sup>2</sup>; 1.5mm<sup>2</sup>; 2.5mm<sup>2</sup>; 4.0mm<sup>2</sup>; 6.0mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR0510	195mm	35mm	110mm

■ Insulated & Non-Insulated Terminals



KDRJ45R

## MODULAR CONNECTOR CRIMPING TOOL

### Features

- Crimps RJ45, RJ11 & RJ9 connectors
- Ratchet action for more secure crimp
- Repeatable action
- Built-in stripper and cutting tool
- Long term durability with comfort grip handles
- Telephone modular connector crimper
- Automatic release with manual override

Product Code	Length	Head	Handle
KDRJ45R	225mm	60mm	110mm



CTR0334

## MC4 SOLAR CRIMPING TOOL

### Features

- Ideal for Solar Panel PV cable terminals
- Ratchet mechanism with pressure adjustment
- Suitable for left or right hand operation
- Automatic release with manual override
- Professional quality drop forged jaws
- **Terminal sizes:**  
2.5mm<sup>2</sup>; 4.0mm<sup>2</sup>; 6mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR0334	250mm	38mm	210mm



CTR0816

## RATCHET CRIMPING TOOL

### Features

- Ratchet crimping tool with automatic release and manual override
- Self-adjusting wire end tool with side entry
- Automatically adjusts to the desired sleeve size
- Produces square crimp profile
- Crimping tool for cord end (bootlace) terminals from 0.08mm<sup>2</sup> to 16mm<sup>2</sup>
- Crimping tool for coax terminals
- Ergonomic design minimises operator fatigue

Product Code	Length	Head	Handle
CTR0816	180mm	43mm	110mm

# CRIMPING TOOLS



## UNIVERSAL CRIMPING TOOL

### Features

- Cuts & strips cable
- Built-in stripper and cutting tool
- Capable of shearing small bolts
- Crimps terminal sizes 1.5mm<sup>2</sup> to 6mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR011	200mm	20mm	70mm



CTR011

## NON-INSULATED CRIMPING TOOL

### Features

- Ratchet mechanism crimp tool for terminals
- Automatic release with manual override
- Professional quality drop forged jaws
- Terminal sizes:  
1.25mm<sup>2</sup>; 2.0mm<sup>2</sup>; 5.5mm<sup>2</sup>; 8.0mm<sup>2</sup>; 16.0mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR0316	280mm	135mm	90mm



■ Non-Insulated Terminals

CTR0316

## HEX CRIMPING TOOL

### Features

- 6-25mm<sup>2</sup> Ratchet Hex Crimping Tool
- Professional quality drop forged jaws
- Hex Crimp type
- Suitable for left or right hand usage
- Terminal sizes:  
6.0mm<sup>2</sup>; 10.0mm<sup>2</sup>; 16mm<sup>2</sup>; 25mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR0525	345mm	50mm	110mm



■ Non-Insulated Terminals

CTR0525

## NON-INSULATED CRIMPING TOOL

### Features

- Ratchet mechanism crimp tool for terminals
- Indent crimping type
- Suitable for left or right hand operation
- Automatic release with manual override
- Terminal sizes:  
6.0mm<sup>2</sup>; 10.0mm<sup>2</sup>; 16.0mm<sup>2</sup>; 25.0mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR0325	345mm	35mm	110mm



■ Non-Insulated Terminals

CTR0325

## PRE-INSULATED CRIMPING TOOL

### Features

- Ratchet mechanism crimp tool for terminals from 0.5mm<sup>2</sup> to 6.0mm<sup>2</sup>
- 3 Colour coded crimp sizes: Red, Blue & Yellow
- Suitable for left or right hand operation
- Automatic release with manual override
- Professional quality drop forged jaws

Product Code	Length	Head	Handle
CTR0323	225mm	38mm	110mm



CTR0323

- RED: 0.5mm<sup>2</sup> - 1.0mm<sup>2</sup>
- BLUE: 1.5mm<sup>2</sup> - 2.5mm<sup>2</sup>
- YELLOW: 4.0mm<sup>2</sup> - 6.0mm<sup>2</sup>

■ Pre-Insulated Terminals

## NON-INSULATED CRIMPING TOOL

### Features

- Ratchet mechanism crimp tool for terminals
- Automatic release with manual override
- Professional quality drop forged jaws
- Terminal sizes:  
1.25mm<sup>2</sup>; 2.5mm<sup>2</sup>; 4.6mm<sup>2</sup>; 8.0-10.0mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR0310	225mm	35mm	115mm



CTR0310

■ Non-Insulated Terminals

## AUTOMOTIVE CRIMPING TOOL

### Features

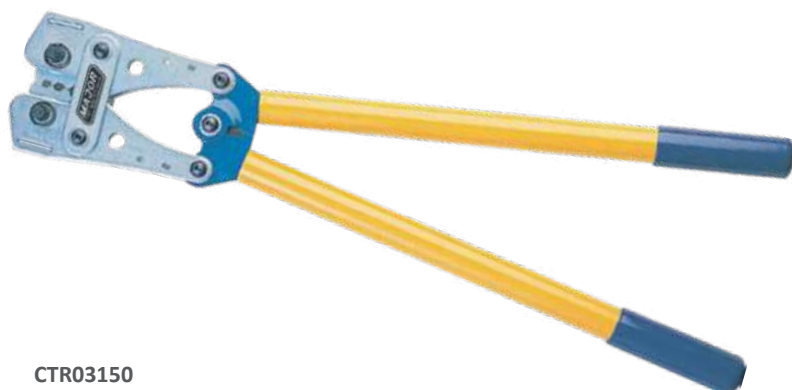
- Automotive and white goods crimp tool for terminals
- Automatic release with manual override
- Professional quality drop forced jaws for non insulated terminals
- Terminal sizes:  
1.5mm<sup>2</sup>; 2.5mm<sup>2</sup>; 6.0mm<sup>2</sup>

Product Code	Length	Head	Handle
CTR0333	225mm	35mm	120mm



CTR0333

■ Brass Terminals



CTR03150

## HEX CRIMPING TOOL

### Features

- High quality hex crimp tool for terminating copper tube cables
- Die sets revolve within the tool head for quick and easy selection
- **Terminal sizes:**  
25mm<sup>2</sup>; 35mm<sup>2</sup>; 50mm<sup>2</sup>; 70mm<sup>2</sup>; 95mm<sup>2</sup> 120mm<sup>2</sup>; 150mm<sup>2</sup>

Product Code	Length	Handle
CTR03150	650mm	470mm

■ Non-Insulated Terminals



CTR03120

## HEX CRIMPING TOOL

### Features

- High quality hex crimp tool for terminating copper tube cables
- Die sets revolve within the tool head for quick and easy selection
- **Terminal sizes:**  
6mm<sup>2</sup>; 10mm<sup>2</sup>; 16mm<sup>2</sup>; 25mm<sup>2</sup>; 35mm<sup>2</sup>; 50mm<sup>2</sup>; 70mm<sup>2</sup>; 95mm<sup>2</sup>; 120mm<sup>2</sup>

Product Code	Length	Handle
CTR03120	650mm	470mm

■ Non-Insulated Terminals



CTR03650

## HEX CRIMPING TOOL

### Features

- High quality hex crimp tool for terminating copper tube cables
- Die sets revolve within the tool head for quick and easy selection
- **Terminal sizes:**  
6mm<sup>2</sup>; 10mm<sup>2</sup>; 16mm<sup>2</sup>; 25mm<sup>2</sup>; 35mm<sup>2</sup>; 50mm<sup>2</sup>

Product Code	Length	Handle
CTR03650	385mm	255mm

■ Non-Insulated Terminals



CTR1020

## ADJUSTABLE INDENT CRIMPING TOOL

### Features

- Heavy duty point indent crimping tool
- Graduated scale an easy screw adjustment allow quick selection of sizes
- Non-ratchet for use on terminals
- **Terminal sizes:**  
10mm<sup>2</sup> - 120mm<sup>2</sup>

Product Code	Length	Crimping Type
CTR1020	570mm	Indent

■ Non-Insulated Terminals



# BATTERY POWERED CRIMPERS



## BATTERY POWERED CRIMPING TOOL

### Features

- OLED Display showing Crimping Time, Electricity Quantity, Maintenance Reminding and Fault Code
- Crimping head rotates 350°
- Two stage hydraulic system with fast feed and power control
- Quick motor stop guarantees highest safety for the operator
- Automatic retraction when crimp is completed
- Electronic control and monitor of crimping operation
- Ergonomic design and optimised position of centre of gravity
- Rated pressure: 120KN
- Oil capacity: 160ml
- Stroke: 42mm
- 5 - 8 seconds per cycle time
- Max crimping: **Copper** 400mm² / **Aluminium** 300mm²

Product Code	Crimping Dies
ECT400	16, 25, 35, 50, 70, 95, 120 150, 185, 240, 300, 400mm²



- Kit Includes:**
- Crimping Tool & Crimping Dies
  - 2x 3.0Ah Batteries
  - 1x Charger
  - Carrying Case



ECT400

## BATTERY POWERED CRIMPING TOOL

### Features

- OLED Display showing Pressing Time, Battery Percentage, Maintenance Notes and Fault Code
- 180° Swivelling Barrel
- Two stage hydraulic system: hydraulic ram output provides more force for reliable connection
- Ergonomic design with light weight and in-line grip
- Easily work overhead and in tight spaces
- Rated pressure: 50KN
- Stroke: 14mm
- 2.5 - 4 seconds per cycle time
- Max crimping: **Copper** 240mm² / **Aluminium** 185mm²

Product Code	Crimping Dies
ECT240	16, 25, 35, 50, 70, 95, 120 150, 185, 240mm²



- Kit Includes:**
- Crimping Tool & Crimping Dies
  - 2x 3.0Ah Batteries
  - 1x Charger
  - Carrying Case



ECT240

## BATTERY POWERED CABLE CUTTING TOOL

### Features

- OLED Display
- Two stage hydraulic system with fast feed and power control
- Fast and reliable way to cut
- Micro-computer control system
- Cuts different cable materials including armoured Cu/Al cable, ACSR, Cu/Al cable
- Cutting Force: 60KN
- Stroke: 86mm
- Cutting Range: Ø85mm

Product Code	Cutting Range
ECC85	Ø85mm



- Kit Includes:**
- Battery Powered Cable Cutter
  - 2x 3.0Ah Batteries
  - 1x Charger
  - Carrying Case



ECC85



HCT435

## HYDRAULIC CRIMPING TOOL SET

### Features

- Safety system inside
- Crimping force: 13 Tonne
- Stroke: 30mm
- Oil capacity: 145cc
- Crimping dies (Included):  
Copper: 35mm<sup>2</sup>, 50mm<sup>2</sup>, 70mm<sup>2</sup>, 95mm<sup>2</sup>, 120mm<sup>2</sup>, 150mm<sup>2</sup>, 185mm<sup>2</sup>, 240mm<sup>2</sup>, 300mm<sup>2</sup>, 400mm<sup>2</sup>  
Aluminium: 35mm<sup>2</sup>, 50mm<sup>2</sup>, 70mm<sup>2</sup>, 95mm<sup>2</sup>, 120mm<sup>2</sup>, 150mm<sup>2</sup>, 185mm<sup>2</sup>, 240mm<sup>2</sup>, 300mm<sup>2</sup>

Product Code	Dies
HCT435	35mm <sup>2</sup> - 400mm <sup>2</sup>



HCT150

## HYDRAULIC CRIMPING TOOL SET

### Features

- Safety system inside
- Crimping force: 60KN
- Stroke: 15mm
- Oil capacity: 60cc
- Crimping Type: Hexagon
- Crimping dies (Included):  
Copper: 10mm<sup>2</sup>, 16mm<sup>2</sup>, 25mm<sup>2</sup>, 35mm<sup>2</sup>, 50mm<sup>2</sup>, 70mm<sup>2</sup>, 95mm<sup>2</sup>, 120mm<sup>2</sup>, 150mm<sup>2</sup>

Product Code	Dies
HCT150	10mm <sup>2</sup> - 150mm <sup>2</sup>

- Includes hard plastic carry case



HCC45

## HYDRAULIC CABLE CUTTER

### Features

- Ø45mm max (for armoured Cu/Alu cable)
- Cutting force: 12 Tonne
- High quality tool steel cutting blades
- Note: Not suitable for cutting steel wired armoured cables

Product Code	Cutting Range
HCC45	Ø45

## REPLACEMENT CRIMPING DIES

### HCT630 Replacement dies



Product Code	Size	Type
D150	150mm	Hex
D185	185mm	Hex
D240	240mm	Hex
D300	300mm	Hex
D400	400mm	Hex
D500	500mm	Hex
D630	630mm	Hex



### HCT435 Replacement dies:

Product Code	Size	Type
C25	25mm	Hex
C35	35mm	Hex
C50	50mm	Hex
C95	95mm	Hex
C120	120mm	Hex
C150	150mm	Hex
C185	185mm	Hex
C240	240mm	Hex

# HYDRAULIC CRIMPING TOOLS



## HYDRAULIC CRIMPING TOOL

Features

- Crimping force: 30T Stroke: 25mm
- Crimping range: 150mm<sup>2</sup> - 630mm<sup>2</sup>
- Crimping type: Hexagon
- Crimping dies (included):  
150mm<sup>2</sup>; 185mm<sup>2</sup>; 240mm<sup>2</sup>; 300mm<sup>2</sup>; 400mm<sup>2</sup>; 500mm<sup>2</sup>; 630mm<sup>2</sup>

Product Code	Dies
HCT630	150mm <sup>2</sup> - 630mm <sup>2</sup>

- **Note:** This product can be matched with the HP700 hydraulic pump
- Includes metal carry case



HCT630

## HYDRAULIC CRIMPING TOOL

Features

- Crimping force: 22 T (Max)
- Stroke: 22mm
- Crimping range: 16mm<sup>2</sup> - 400mm<sup>2</sup> (Max)
- Crimping type: Hexagon
- Copper conductor size
- Crimping dies (Included):  
16mm<sup>2</sup>; 25mm<sup>2</sup>; 35mm<sup>2</sup>; 50mm<sup>2</sup>; 70mm<sup>2</sup>; 95mm<sup>2</sup>; 120mm<sup>2</sup>; 150mm<sup>2</sup>; 185mm<sup>2</sup>; 240mm<sup>2</sup>; 300mm<sup>2</sup>; 400mm<sup>2</sup>

Product Code	Dies
HCT416	16mm <sup>2</sup> - 400mm <sup>2</sup>



HCT416

## HYDRAULIC PUMP

Features

- Maximum pressure: 700kg/cm
- Oil capacity: 900cc
- Solid shaped stand gives the pump stability during operation
- Supplied with 2m long pressure hose complete with female self lock quick coupler

Product Code	Dies
HP700	700mm

- Includes metal carry case



HP700





CS03100



CARRY BAG

## RATCHET CABLE SHEARS

### Features

- Durable blades for superior cutting
- Precise ratchet & release mechanism
- Comfortable handle grips with finger stops to prevent slipping
- 240mm<sup>2</sup> Max cutting range for Aluminium & Copper
- Max Cable Diameter 32mm
- Spring loaded handles for ease of use
- Note: Not suitable for cutting solid steel bar or cable with steel cores, wire and rope

Product Code	Length
CS03100	250mm



CSR0380

## RATCHET CABLE SHEARS

### Features

- Max Cutting Range: 500mm<sup>2</sup> Aluminium
- Max Cutting Range: 400mm<sup>2</sup> Copper
- Telescopic handles for max leverage
- Precise ratchet & release mechanism
- Comfortable handle grips with finger stops to prevent slipping
- Quick release lock
- Note: Not suitable for cutting solid steel bar or cable with steel cores, wire and rope

Product Code	Length
CSR0380	250mm



CSR0400

## CABLE CUTTER

### Features

- Cutting range: 500mm<sup>2</sup> Max for Aluminium conductor
- Cutting range: 400mm<sup>2</sup> Max for Copper conductor
- Note: Not suitable for cutting solid bar or cable with steel cores, wire & rope

Product Code	Length
CSR0400	410mm



CSWA01



TELESCOPIC HANDLES

## ARMoured CABLE CUTTER

### Features

- Effortless cutting of armoured steel wire cable
- Telescopic handles for max leverage
- Precise ratchet and release mechanism
- 150mm<sup>2</sup> SWA Max cross section
- Armoured: Max diameter cable 55mm  
Max Cross Section 150mm<sup>2</sup>
- Non-Armoured: Max diameter cable 55mm  
Max cross section 630mm<sup>2</sup>
- Carrying case included

Product Code	Length
CSWA01	375mm



CWR01

## STEEL WIRE CABLE SHEARS

### Features

- Designed for effortless cutting of wire rope
- Ideal for low voltage lighting steel wire
- Automatic sprung operation for one handed use
- Max diameter cable 5mm<sup>2</sup>
- Max cross section 20mm<sup>2</sup>

Product Code	Length	Head	Handle
CWR01	190mm	50mm	140mm

# CABLE SHEARS



## CABLE SHEAR

Features

- Max diameter cable 7mm
- Max cross section 38mm<sup>2</sup>
- High grade carbon steel
- Note: Not suitable for cutting steel wire armoured cable

Product Code	Length	Head	Handle
CS0338	215mm	70mm	130mm



CS0338

## CABLE SHEAR

Features

- Max diameter cable 20mm
- Max cross section 60mm<sup>2</sup>
- Insulated handle
- Note: Not suitable for cutting steel wire armoured cable

Product Code	Length	Head	Handle
CS0360	243mm	80mm	145mm



CS0360

## 1000V CABLE SHEAR

Features

- High quality 50CRV material
- 38mm<sup>2</sup> Max cross section
- 7mm Max cable diameter
- Heavy duty 1000V TPE handles
- Note: Not suitable for cutting steel wire armoured cable

Product Code	Length	Head	Handle
CS0340	215mm	70mm	130mm



CS0340

## VDE CABLE SHEAR

Features

- 50mm Width blades
- 38mm Max cross section
- 7mm Max diameter cable
- Compact, one handed cable shear, cuts cleanly & effortlessly
- Conforms to IEC 60900 standard
- Note: Not suitable for cutting steel wire armoured cable

Product Code	Length	Weight	Blade Width
VCSS0108	210mm	360g	50mm



VCSS0108

## CABLE SHEAR

Features

- High grade carbon steel
- Heavy duty insulation on hand grips
- Max cross section 22mm<sup>2</sup>
- Max diameter cable 6mm
- Note: Not suitable for cutting steel wired armoured cable

Product Code	Length	Head	Handle
KDC22	165mm	60mm	97mm



KDC22

## FIBRE OPTIC CABLE SHEAR

Features

- High grade carbon steel
- Heavy duty insulation on hand grips
- Reduces cutting force by 40%
- Aperture spring for hardend steel wire
- Suitable for cutting fiber optic cable

Product Code	Length	Head	Handle
KDLAC01	165mm	45mm	120mm



KDLAC01

## TIN SNIPS CABLE SHEAR

Features

- Straight cut drop forged chrome vanadium steel blades
- Cuts up to 1.2mm cold rolled steel or 0.7mm AISI 304 stainless steel
- Induction hardened serrated edge blades for stronger grip
- Spring loaded handles with vinyl sleeving and finger guards

Product Code	Length	Head	Handle
TS015	160mm	45mm	115mm



TS015



## OFFSET HEX KEYS

### Features

- Fully insulated for use on live conductors up to 1000V AC
- Conforms to EN 60900 standards
- Chrome vanadium steel
- Individually tested to 10 000V

Product Code		mm
VB03	3	130
VB04	4	140
VB05	5	160
VB06	6	180
VB08	8	210
VB10	10	240

\*Sizes in mm



## METRIC HEX KEY SETS

### Features

- Professional quality chrome vanadium
- Bevelled ends for easy screw access
- Supplied in easy to select protective case
- HK0308: 9 Piece Set - 1,5mm, 2mm, 2,5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm
- BPHK0308: 9 Piece Set - 1,5mm, 2mm, 2,5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm
- Hexagonal keys with ball point ends on the long arm and conventional hex on the short arm (BPHK0308)

Product Code	Angle	Tip
HK0308	90°	Standard
BPHK0308	90°	Ball



## COAXIAL WIRE STRIPPER

### Features

- Rotary coaxial cable stripper
- Finger opening in handle for ease of rotation
- Easy adjustable to strip inner and outer core in one operation
- 3 Blade Model

Product Code	Cable strip sizes
CS03410	4.0mm - 10.0mm



## WIRE STRIPPER

### Features

- Strips cable 4.0mm<sup>2</sup> to 28.0mm<sup>2</sup>
- Round cable (dia. 4.28mm) is placed in the "V" section, the stripper is rotated to cut circumference of cable sheath
- Outer stripper is then pulled up cable to strip length of sheath
- Sharpened hook and knife function are also incorporated to assist
- Spare Swivel blade inside handle included

Product Code	Length	Blade	Handle
WS828	180mm	40mm	110mm



# WIRE STRIPPERS



## AUTOMATIC WIRE STRIPPER

### Features

- Automatically adjusts to cable size in easy one-handed operation
- Strips stranded and solid conductors of 1.0mm<sup>2</sup> to 3.2mm<sup>2</sup>
- Built-in wire cutter
- Insulated crimpers Yellow, Red & Blue
- Non insulated 1,5 - 2,5, 4-6mm



WS0310

Product Code	Cable strip sizes
WS0310	1.0mm <sup>2</sup> - 3.2mm <sup>2</sup> diameter

■ Insulated & Non-Insulated Terminals

## AUTOMATIC WIRE STRIPPER

### Features

- Ideal for production when stripping lighter gauge wires, automotive wiring, instrumentation wire and avionic wire
- Knife type steel blade
- Delayed action prevents crushing or cutting of wires
- Zinc Alloy body with PVC handle grips



WS1032  
WS0520

Product Code	Cable strip sizes
WS1032	1.0mm <sup>2</sup> - 3.2mm <sup>2</sup>
WS0520	0.5mm <sup>2</sup> - 2.0mm <sup>2</sup>

## STRIPPING PLIERS

### Features

- Strips cable size 0.3mm<sup>2</sup> to 6.0mm<sup>2</sup>
- High quality 50CRV material
- Spring assist opening
- Easy to adjust stop with locking nut
- Heavy duty 1000V TPE handles
- Individually tested to 10 000V
- 1000V Safe



SP1006

Product Code	Length	Head	Handle
SP1006	160mm	44mm	124mm

## STRIPPING PLIERS

### Features

- Spring assist opening
- Strips cable size 0.3mm<sup>2</sup> to 6.0mm<sup>2</sup>
- Suitable for both hard & soft wire
- 55# Carbon steel
- Heavy duty insulation
- Easy to adjust stop with locking nut



SP160

Product Code	Length	Head	Handle
SP160	160mm	44mm	118mm

## WIRE STRIPPER

### Features

- Hardened and precision ground steel jaws
- Wire sizes 0.75mm<sup>2</sup> to 6.00mm<sup>2</sup>
- Built-in wire cutter
- Adjust to most wire sizes
- Spring Loaded



WS220

Product Code	Length	Blade	Handle
WS220	125mm	20mm	55mm



RSS34

## 34PC RATCHET SOCKET SET

### Features

- Chrome vanadium
- Metal case

Product Code	Length	Width	Depth
RSS34	231mm	115mm	40mm

### Set Includes

- 13 x socket 1/4":  
4/4.5/5/5.5/6/7/8/9/10/11/12/13/14mm
- 2 x extension bars 3" & 6"
- 1 x slide T-bar 120mm
- 1 x universal joint
- 1 x quick release ratchet handle 72 teeth
- 12 x socket bits : Slotted : 4.6mm  
Phillips : #0, #1, #2, #3  
Hex : 3,4,5,6,7,8mm
- 1 x screwdriver handle 150mm
- 3 x hex : 1.5, 2, 2.5mm



RSS27

## 27PC RATCHET SOCKET SET

### Features

- Chrome vanadium
- Metal case

Product Code	Length	Width	Depth
RSS27	446mm	155mm	40mm

### Set Includes

- 20 x socket 1/2":  
8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/  
23/24/25/26/27/28/29/30/31/32mm
- 2 x spark plug socket 1/2" x 16,21mm
- 1 x quick release ratchet handle 72 teeth
- 1 x universal joint 1/2"
- 2 x extension bars 5" & 10"
- 1 x 3/8" F x 1/2" M 3-way adaptor



RSS22

## 22PC RATCHET SOCKET SET

### Features

- Chrome vanadium
- Metal case

Product Code	Length	Width	Depth
RSS22	314mm	155mm	40mm

### Set Includes

- 15 x socket 3/8":  
6/7/8/9/10/11/12/13/14/15/16/17/18/19/22mm
- 2 x spark plug socket 3/8" x 16,21mm
- 1 x quick release ratchet handle 72 teeth
- 1 x sliding T-bar 10"
- 1 x universal joint 3/8"
- 2 x extension bars 3" & 6"



RWS06

## 6PC RATCHET WRENCH SET

### Features

- 6 Piece set
- Rotates 360° clockwise and anticlockwise
- 12 gripping teeth
- High Torque Values
- CRV and carbon steel
- Mirror finish

Product Code	Length	Width	Depth
RWS06	220mm	95mm	42mm



GROOVE JOINT PLIERS

Features

- High grade carbon steel
- Straight jaw grip
- Easily adjustable jaw opening
- Insulated handle
- Double milled groove joint for extra grip and safety
- Cushioned hand grips for comfort in use

Product Code	Length	Head	Handle
GJP0308	200mm	70mm	130mm
GJP0310	255mm	85mm	170mm
GJP0312	300mm	100mm	200mm



GJP0 Range

LOCKING PLIER

Features

- High quality chrome vanadium steel
- Curved jaws for maximum grip
- Quick release toggle
- Hardened rivets for longer life
- 30mm Max jaw opening

Product Code	Length	Jaw	Handle
MGP0310	230mm	35mm	195mm



MGP0310

ADJUSTABLE SPANNERS

Features

- High quality chrome vanadium steel
- Professional corrosion resistant black finish
- Deep etched metric graduations for fast pre-adjustment of size

Product Code	Length	Jaw	Handle
AS0304	100mm	15mm	60mm
AS0306	155mm	20mm	100mm
AS0308	200mm	25mm	135mm
AS0310	250mm	35mm	215mm
AS0312	300mm	40mm	260mm



AS0 Range

NUT DRIVER/TUBE SPANNER SET

Features

- 9 Piece
- Chrome vanadium construction
- Use as a tube spanner
- Contoured rubber handles
- Firm comfortable grip

Product Code	Length	Blade	Tip
KTN0309	205mm	125mm	3.2mm
	205mm	125mm	4mm
	205mm	125mm	5mm
	205mm	125mm	5.5mm
	235mm	125mm	6mm
	235mm	125mm	7mm
	250mm	130mm	8mm
	250mm	130mm	10mm
	250mm	130mm	13mm



KTN0309





HSP0312

## PROFESSIONAL HACKSAW

### Features

- Complete with high grade Bi-metal blade
- Hand grip design for comfort & protection
- Strong beam
- Additional 45° blade position for use at awkward angles
- Easy to use tensioning device

Product Code	Length	Height	Blade
HSP0312	400mm	140mm	300mm



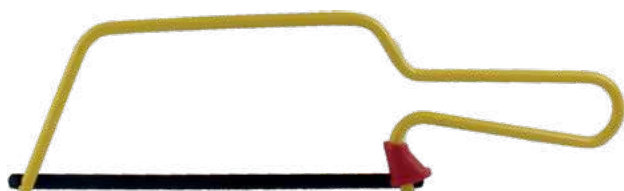
HSA0306

## ADJUSTABLE HACKSAW

### Features

- High grade HSS blade for cutting metal or wood
- Fully adjustable for 3 angles
- Comfortable moulded handle
- Adjustable blade tension
- Strong aluminium

Product Code	Length	Height	Blade
HSA0306	260mm	80mm	150mm



HSP0606

## JUNIOR HACKSAW

### Features

- High grade HSS blade
- Quality spring steel construction
- Long life spring steel frame
- Handy size to reach awkward places

Product Code	Length	Height	Blade
HSP0606	240mm	60mm	150mm



UK0306

## UTILITY KNIFE

### Features

- Die cast zinc alloy housing
- Multi position blade setting
- Heavy duty
- Adjustable for depth of cut
- Spare blade storage in handle
- Convenient hole for storing
- SB0306: 10 Piece Carbon steel replacement blades

Product Code	Length	Width	Height
UK0306	150mm	30mm	18mm



MPK0901N

## FOLDING KNIFE

### Features

- Die cast zinc alloy housing
- Stainless steel skeleton
- Aluminum handle with belt clip
- Safety lock-back system
- Quick blade change mechanism

Product Code	Length	Width	Height
MPK0901N	110mm	42mm	20mm



SB0306

## SPARE BLADES

### Features

- SB0306: Carbon steel blade replacement

Product Code	Length	Packet	Steel
SB0306	60mm	10	Carbon

## TAPE MEASURES

### Features

- Best quality tape measurement
- Class I accuracy power tape
- Rubberized moulded housing
- Easy to release
- Powerful non-slip brake for blade
- Shock absorbing device
- Reinforced hook
- Magnetic tip
- Nylon coating on tape

Product Code	Length	Tape
HV0303	3m	16mm
HV0305	5m	25mm
HV0375	8m	25mm



HV0375



HV0305



HV0303

## DIGITAL CALIPER

### Features

- Selectable mm or inches with zero adjustment function
- Measurement length - 150mm with resolution of 0.01mm
- 1.5V Silver oxide battery supplied included

Product Code	Length	Width	Height
KTV150	180mm	86mm	25mm



KTV150

## MAGNETIC SPIRIT LEVEL

### Features

- 3 Way horizontal, vertical and 45° angle finding
- Tough plastic construction
- Fixed all-round viewing
- Built-in magnetic base for fixing steel boxes
- Vials have a yellowish-green tint with additives for UV protection

Product Code	Length	Width	Height
SLM0806	200mm	15mm	45mm



SLM0806

## SPIRIT LEVEL

### Features

- 3 Way horizontal, vertical and 45° angle finding
- Tough, hardened aluminium
- Accuracy 0.5mm per 1 metre (0.0286°) in normal position
- Vials have a yellowish-green tint with additives for UV protection
- Fixed all round viewing
- Protective end caps
- Shock resistant vials

Product Code	Length	Width	Height
SLM24	600mm	20mm	55mm



SLM24

## UNIVERSAL KEY

### Features

- Multi-purpose key fits gas, electric cupboards, ventilation systems, stop valves
- Made from die-cast zinc
- Fits square, 3-square and double pin
- Supplied with slotted and Philips bits

Product Code	Tool Dimension	Bit Length
UKEY01	75mm <sup>2</sup>	40mm



UKEY01



MTCT Range

## TUNGSTEN CARBIDE HOLESAWS

### Features

- Ideal for cutting hard metal like stainless steel and steel plate

Product Code	Hole	Chuck
MTCT20	20mm	10mm
MTCT22	22mm	10mm
MTCT25	25mm	10mm
MTCT32	32mm	10mm
MTCT40	40mm	13mm
MTCT51	51mm	13mm
MTCT64	64mm	13mm
MTCT73	73mm	13mm
MTCT76	76mm	13mm
MTCT83	83mm	13mm



MHS Range

## HSS HOLESAWS

### Features

- Ideal for cutting mild steel, stainless and tool steel, cast iron, copper, aluminium, not more than 2mm

Product Code	Hole	Chuck
MHS16	16mm	10mm
MHS20	20mm	10mm
MHS22	22mm	10mm
MHS25	25mm	10mm
MHS32	32mm	13mm
MHS40	40mm	13mm
MHS50	50mm	13mm



DCB230



DCB115

## DIAMOND CUTTING BLADES

### Features

- Diamond Cutting Blade
- Max 80m/s
- Max 13 200RPM (DCB115)
- Max 6 600RPM (DCB230)
- Ideal for cutting concrete, stone, hard ceramics & thin granite

Product Code	Segments	Bore	Diameter
DCB115	9	23mm	115mm
DCB230	18	20mm	230mm



DS125

DS129

DS187

DS220

DS353

## STEP DRILLS

### Features

- Drills true, round holes in thin materials such as metal, wood and plastic
- Made from the finest grade of high speed steel
- Hole size quickly determined
- Drill numerous sizes of holes with the one cutter
- Automatically de-burrs drilled holes

Product Code	Steps	Hole	Chuck
DS125	5	4-12mm	10mm
DS129	9	4-12mm	10mm
DS187	7	6-18mm	10mm
DS220	10	4-22mm	10mm
DS353	13	6-35mm	10mm



# HOESAWS / DRILLS / ARBORS



## HEAVY DUTY BI-METAL HOESAW

### Features

- Alternate set variable pitch 4/6 teeth - producing tighter grip, less vibration, cleaner faster cut
- Hoesaws can be used in electric pneumatic drills, vertical drilling machines and lathes
- Heavy duty bi-metal construction
- Original pattern pressed gap gives full cutting depth
- M3 steel cutting edge keeps teeth sharper longer
- Shatterproof body designed for staying power
- Hoesaws, arbors and pilot drills are fully interchangeable with all leading manufacturers of hoesaw products
- Ideal for cutting brass, copper, steel, aluminium and wood

Product Code	Hole	Arbor 1*	Arbor 2*
KHS16	16mm	AB14	AB19
KHS20	20mm	AB14	AB19
KHS22	22mm	AB14	AB19
KHS25	25mm	AB14	AB19
KHS32	32mm	AB35	AB45
KHS38	38mm	AB35	AB45
KHS40	40mm	AB35	AB45
KHS51	51mm	AB35	AB45
KHS54	54mm	AB35	AB45
KHS57	57mm	AB35	AB45

Product Code	Hole	Arbor 1*	Arbor 2*
KHS64	64mm	AB35	AB45
KHS65	65mm	AB35	AB45
KHS67	67mm	AB35	AB45
KHS70	70mm	AB35	AB45
KHS73	73mm	AB35	AB45
KHS75	75mm	AB35	AB45
KHS83	83mm	AB35	AB45
KHS95	95mm	AB35	AB45
KHS105	105mm	AB35	AB45
KHS111	111mm	AB35	AB45



KHS Range

\* SUGGESTED ARBOR

## HOESAW KIT

### Features

- 10 Piece bi-metal hoesaw kit
- Ideal for cutting brass, copper, steel, aluminium and wood

### Set includes

- Hoesaws:
  - 1 x KHS20 20mm; 1 x KHS25 25mm;
  - 1 x KHS32 32mm; 1 x KHS38 38mm;
  - 1 x KHS40 40mm; 1 x KHS51 51mm
- Arbors: AB19; AB45
- Pilot Drills: 1 x PD1; 1 x PD2

Product Code	Length	Width	Height
KHS093	320mm	190mm	100mm



KHS093

## ECONOMY ARBORS

### Features

- Supplied complete with pilot drill
- AB14 use with KHS16, KHS20, KHS22 & KHS25
- AB19 use with KHS16, KHS20, KHS22 & KHS25
- AB35 use with KHS32, KHS38, KHS40, KHS51, KHS54, KHS57, KHS64, KHS65, KHS67, KHS70, KHS73, KHS75, KHS83, KHS95, KHS105 & KHS111mm
- AB45 use with KHS32, KHS38, KHS40, KHS51, KHS54, KHS57, KHS64, KHS65, KHS67, KHS70, KHS73, KHS75, KHS83, KHS95, KHS105 & KHS111mm

Product Code	Type	Fits	Chuck
AB14	Low Cost	16-25mm	10-13mm
AB19	Hex	16-25mm	10-13mm
AB35	Hex	32-111mm	10-13mm
AB45	Hex	32-111mm	13mm



## PILOT DRILLS

### Features

- PD1: For use with AB19, AB35 & AB45
- PD2: For use with AB14

Product Code	Length	Size
PD1	75mm	6mm
PD2	110mm	6mm





TDM0540

## TAP AND DIE SET

### Features

- Comprehensive 40 piece metric tap and die set
- Manufactured in high quality Tungsten Alloy Steel
- Ideal for cleaning, cutting and repairing threads
- Tap & die of course & fine threads: M3 x 0.5; M4 x 0.17; M5 x 0.8; M6 x 1.0; M8 x 1.25; M10 x 1.0; M10 x 1.5; M12 x 1.25; M12 x 1.75

### Set includes

- 1 x 8 Inch adjustable tap and wrench handle
- 1 x Set T handle tap wrench
- 1 x Die handle
- 1 x Screwdriver

Product Code	NPT Tap	Die Wrench
TDM0540	1/8 - 27	25mm OD

■ Includes metal carry case



FTS60

FTS30

## FISH TAPES

### Features

- To pull electrical and telecommunication cables through conduit
- Draw-wire manufactured from carbon steel
- Button to allow the draw-wire to return to original position
- Windows to see the amount of draw-wire in the roll

Product Code	Length	Housing
FTS30	30m	Tough Plastic
FTS60	50m	Tough Plastic



CL1630

## CHALK LINE

### Features

- Tough die cast construction
- Pure cotton line
- Can be used as a plumb line
- Fold away winding handle
- Slide action filling hole

Product Code	Line Length	Marked Degrees
CL1630	30m	0° & 45°



CLC1620

## CHALK

### Features

- Replacement chalk

Product Code	Colour	Weight
CLC1620	Red	100g

# GAS SOLDERING IRONS



## PORTABLE SOLDERING IRON KIT

### Features

- For DIY & the hobbyist
- Fully portable always ready to use
- Flaming welding and brazing temperatures 1300°C
- Soldering and hot air shrink temperature 500°C
- Refillable gas torch with adjustable flame control
- Continuous flame lock mechanism
- Aluminium body for ruggedness and protective cap with pocket clip
- Flame off button & safety locks ensures that the tool cannot be accidentally ignited
- Butane gas operated with built-in gas igniter
- Melting and fusing
- Plastic pipe bending and modeling
- Plastic fusing and repair

Product Code	Weld	Length	Tips
MTD48	1300°C	235mm	5 different



Recommend using MTD1 Butane Gas refill

MTD48



## PORTABLE SOLDERING IRON

### Features

- Fully portable always ready to use
- Flaming welding and brazing temperatures 1300°C
- Soldering and hot air shrink temperature 500°C
- Refillable gas torch with adjustable flame control
- Continuous flame lock mechanism
- Aluminium body for ruggedness and protective cap with pocket clip
- Flame off button & safety locks ensures that the tool cannot be accidentally ignited
- Butane gas operated with built-in gas igniter
- Melting and fusing
- Plastic pipe bending and modeling
- Plastic fusing and repair

Product Code	Weld	Length	Tip
MTD46	1300°C	235mm	1



Recommend using MTD1 Butane Gas refill

MTD46



## SOLDER SUCKER

### Features

- Desoldering tool for solder removal
- Ideal to remove solder from circuit boards during electronic repairs
- Sturdy design
- Aluminium housing

Product Code	Length	Diameter	Tip
SS1	190mm	20mm	18mm



SS1

## MULTI CORE SOLDER

### Features

- Increases bit life of the soldering iron by up to 10 times
- Coil solder
- 60 tin /40 lead
- Supplied in handy dispenser

Product Code	Core	Size	Weight
SL518	Multicore	1.0mm	18g



SL518

## MULTI CORE SOLDER

### Features

- Increases bit life of the soldering iron by up to 10 times
- 1mm Roson coil solder
- 60 tin /40 lead
- Supplied in handy dispenser

Product Code	Core	Size	Weight
SL5200	Multicore	1mm	200g



SL5200

## GAS LIGHTER REFILL

### Features

- Butane Gas
- Multiple filling nozzels in cap

Product Code	Volume
MTD1	300ml



MTD1



## SOLDERING STATION



SIS100

### Features

- 220V AC Input 48Watt
- Temperature range from 150°C to 450°C
- Switch on/off LCD display of Temperature
- Five pin connection of iron to station
- Soldering iron stand with sponge

Product Code	Watt	Tip
SIS100	48W	6.0mm

## PROFESSIONAL SOLDERING STATION



SIS200

### Features

- Quick heat soldering iron. 220V Input 60 Watt
- Temperature range from 200°C to 420°C
- Switch on/off LCD display of Temperature
- Six pin connection of iron to station
- Soldering iron stand with sponge
- Spare tips

Product Code	Watt	Tip
SIS200	60W	6.0mm

## ELECTRIC SOLDERING IRONS



SIS30

SIS60

### Features

- Fitted with a fine tip
- Compact design & comfortable to use
- High quality long life
- Ideal for general purpose soldering
- Household electrical appliances and capacitors

Product Code	Watt	Max Temp	Length
SIS30	30W	380°C	185mm
SIS60	60W	450°C	210mm

## ELECTRIC SOLDERING GUN



SI100

### Features

- Pistol grip for easy operation
- Trigger action to increase the power from 30W to 130W
- The dual-power soldering iron is a light duty soldering iron with optional additional power
- Complete with spare tip
- Compact design for easy storage

Product Code	Watt	Max Temp	Grip
SI100	100W	450°C	Pistol

## PUNCHDOWN TOOL

### Features

- Punchdown and insertion tool for Krone style blocks
- Automatically inserts and trims wire in one action
- Datacom tool

### How it works

- To use the punch down tool, a wire is prepositioned into a slotted post and then the punch down tool is pressed down on top of the wire, over the post. Once the required pressure is reached, the internal spring is triggered, and the blade pushes the wire into the slot, cutting the insulation, securing the wire.

Product Code	Length	Width
KDKP01	180mm	33mm



KDKP01

## PUNCHDOWN TOOL

### Features

- Universal - can be used with either Krone or 110 style blades
- High and low impact adjuster
- Lockable storage in handle for replacement blades
- Blades easily and quickly changed
- Datacom tool

### Ideal for

- Ideal for inserting wire into insulation-displacement connectors on punch down blocks, patch panels, keystone modules, and surface mount boxes

Product Code	Length	Width
KDIP01	190mm	35mm



KDIP01

## INSPECTION MIRROR

### Features

- Double joint ball links swivel mirror for 360° viewing
- Brass tube with chrome plating
- 505mm Extension Length
- Non-rotating inner hex rods prevent mirror from swinging out of alignment

Product Code	Length	Swivel	Mirror
PIM1	178mm	360°	32mm



PIM1

## SPRING HOOK

### Features

- Best way to reposition springs
- Soft grip on shaft

Product Code	Length	Hook 1	Hook 2
SH175	205mm	Push	Pull



SH175

## SHARP POINT SCISSORS

### Features

- Crafted from high-quality stainless steel
- Comfortable, break- proof handles

Product Code	Length	Head	Width
SSC1	150mm	50mm	50mm



SSC1



## MINI PLIERS

### Features

- ETSC0104: Mini Diagonal Cutter for clipping leads and extra solder tails
- ETLP0104: Mini Long Nose Pliers ideal for confined spaces
- ETBP0104: Mini Combination Pliers ideal for getting a grip on small components
- Ideal for cutting wires and will come in handy with most electronic and robotic equipment
- Precision machined jaws
- High grade carbon steel
- Non-slip, soft grip handles
- Spring loaded return

Product Code	Length	Jaw	Handle
ETSC0104	120mm	20mm	65mm
ETLP0104	120mm	35mm	65mm
ETBP0104	120mm	30mm	73mm



## BENT TWEEZER

### Features

- Crafted from high-quality stainless steel

Product Code	Length	Tip Angle
BT140	140mm	45°



## STAINLESS STEEL TWEEZER SET

### Features

- Non-corrosive stainless steel
- Anti-Acid
- Anti-Magnetic

### Set includes

- 1 x Reverse action (clamps when released)
- 1 x Needle Point
- 1 x Duck bill needle point
- 1 x Duck bill flat point

Product Code	Length	Heads
STS0304	±140mm	4 Different



## 4-IN-1 TRIMMING TOOL

### Features

- Incorporates 19 different profiles to suit all popular TRIM POTS, I.F.T. and H.F. COILS
- Made from tough, insulating, low capacitance POLYACETAL type material
- Includes extension shaft for adjustment of recessed TRIM POTS

Product Code	Length
TT1	±150mm



## MAGNIFYING GLASS

### Features

- Lightweight frame and handle
- Classically shaped magnifying glass is made from strong and durable materials
- Easy to grip sturdy handle
- High quality glass lens
- Magnification strength from X3 to X5

Product Code	Length	Handle	Glass
MG1	150mm	100mm	50mm <sup>2</sup>



### 3W LED HEADLIGHT

- Features
- 90° Tilt
  - Battery pack
  - 3 Light modes: 100% light, 30% light & flashing light (Strobe function)
  - Adjustable headstrap
  - Aluminium & ABS housing
  - 3W COB LED
  - Uses 3 x AAA Batteries (Not included)

Product Code	Watt	Weight	Lumen
MPL0407	3W	85g	150lm

MPL0407



### 3W LED HEADLIGHT

- Features
- 90° Tilt
  - 3 Light modes: 100% light, 50% light & flashing light (Strobe function)
  - Adjustable headstrap
  - Aluminium & ABS rubberized housing
  - 3W COB LED
  - Uses 3 x AAA Batteries (Not included)

Product Code	Watt	Weight	Lumen
MPL0405	3W	58g	120lm

MPL0405



### 3W LED HEADLIGHT

- Features
- 90° Tilt
  - 3 Light modes: 100% light, 60% light & flashing light (Strobe function)
  - Adjustable headstrap
  - Plastic housing
  - 3W COB Max Light
  - Uses 3 x AAA Batteries (Not included)

Product Code	Watt	Weight	Lumen
MPL0402	3W	40g	50lm

MPL0402



### 3W LED WORK LIGHT

- Features
- ON/OFF Light function
  - 3W COB Max Light with additional 3pc LED Torch
  - 360° Swivel hook
  - 90° Tilt
  - TWO magnets
  - 3hrs for 3W COB battery life
  - 10hrs for 3pc LED battery life
  - Uses 3x AAA batteried (Not included)

Product Code	Watt	Lumen
MSL160	3W	210 lm

MSL160



BACK & BOTTOM MAGNETS



90° TILT



360° SWIVEL HOOK



TOP LED LIGHTS



### 3W LED WORK LIGHT

- Features
- ON/OFF Light function
  - 3W COB Max Light
  - 360° Swivel hook
  - Magnet button
  - 180° Tilt
  - 3hrs battery life

Product Code	Watt	Lumen
MPS80	3W	200 lm

MPS80



180° TILT



360° SWIVEL HOOK





MFL140

## 6W LED FLASHLIGHT

### Features

- Zoom @5M x1, x250 x500, x1000, x2000
- Rubberized switch and handy strap
- 4 Light modes: 100% Light, 50% Light, 20% Light & flashing light
- Aluminium housing
- 8hrs battery life
- Uses 3x AAA batteried (Not included)

Product Code	Watt	Lumen
MFL140	6W	500 lm



MFL240D

## 500 LUMEN LED FLASHLIGHT

### Features

- 500 Lumens
- T6 Cree LED
- Light Modes: High – Middle – Low – Strobe – SOS
- 8 hour battery life (alkaline batteries) – not included
- 100 – 150m beam angle
- IP65

Product Code	IP Grade	Weight	Lumen
MFL240D	IP65	288g	500lm



MFL225AA

## 2600 LUMEN LED FLASHLIGHT

### Features

- 2600 Lumens
- XHP70 Cree LED
- Light Modes: High – Middle – Low – Strobe – SOS
- 8 hour battery life (alkaline batteries) – not included
- 400 – 500m beam angle
- IP65

Product Code	IP Grade	Weight	Lumen
MFL225AA	IP65	293g	2600lm



MFL-90-DB12

## 3W COB LED FLASHLIGHTS

### Features

- 12 Pieces
- Light Weight
- Black Lanyard
- Compact Size
- Battery Life 8-9 Hours
- Colours: Blue; Black; Red & Green

Product Code	Watt	Lumen
MFL-90-DB12	3W	30lm



MFL100B24

## LED FLASHLIGHTS

- 24 in a box
- 3W COB LED
- Battery Life 8-9 Hours
- Up to 50 Lumens
- Black Lanyard
- Random colours supplied

Product Code	Watt	Lumen
MFL100B24	3W	50lm

# TOOL KITS WITH METERS



## TOOL KIT WITH DIGITAL MULTIMETER

### Kit includes

- **MT870:** Digital Multimeter
- **LP160:** 170mm Long Nose Plier
- **AS0308:** 200mm Adjustable Spanner
- **CTR240:** 250mm Crimping Pliers
- **UK0306:** Retractable Utility Knife
- **KTK0306:** 6 Pce 1000V Electrician Screwdriver Set
- **VNS1407:** 140mm Neon Screwdriver
- **HK0308:** 8 Pce Metric Hex Key Set
- **MPL0402:** 3W Cob Headlamp 50 Lumens
- **EP200:** 200mm Combination Plier
- **DP200:** 210mm Diagonal Cutting Plier

Product Code	Length	Width	Depth
TKE1208	390mm	240mm	100mm

■ Supplied in TH03914 carrying case



TKE1208

## TOOL KIT WITH DIGITAL CLAMP METER

### Kit includes

- **MT720:** 400A AC Clamp Meter
- **UKEY01:** Universal Key
- **EP200:** 200mm Combination Pliers
- **LP160:** 170mm Long Nose Pliers
- **VNS1407:** Neon Screwdriver Tester
- **KDC22:** 50mm Cross Section Cable Shear
- **UK0306:** Utility Knife
- **CTR240:** 250 Crimping Pliers
- **AS0308:** 200mm Adjustable Spanner
- **KTK0707SG:** 7 Piece 1000V Screwdriver Set

Product Code	Length	Width	Depth
TKE1210	390mm	240mm	100mm

■ Supplied in TH03914 carrying case



TKE1210

## TOOL KIT WITH DIGITAL MULTIMETER

### Kit includes

- **MT876:** Digital Multimeter
- **HK0308:** 8 Piece Metric Hex Key Set
- **EP200:** 200mm Combination Pliers
- **LP160:** 170mm Long Nose Pliers
- **DP200:** 210mm Diagonal Cutting Pliers
- **CTR240:** 250mm Crimping Plier
- **VNS1407:** Neon Screwdriver Tester
- **UK0306:** Utility Knife
- **AS0308:** 200mm Adjustable Spanner
- **KTK0707SG:** 7 Piece 1000V Screwdriver Set
- **MPL0402:** 3W COB LED headlamp

Product Code	Length	Width	Depth
TKE1211	390mm	240mm	100mm

■ Supplied in TH03914 carrying case



TKE1211

## BASIC ELECTRONIC SERVICE KIT

### Kit includes

- **MT870:** Digital Multimeter
- **EP0106:** 165mm Combination Pliers
- **DP0106:** 165mm Diagonal Cutting Pliers
- **LP0106:** 170mm Long Nose Pliers
- **ETSC0104:** 110mm Precision Diagonal Cutter
- **ETLP0104:** 125mm Precision Long Nose Plier
- **ETBP0104:** 120mm Precision Combination Plier
- **UK0306:** Utility Knife
- **KTPS0208:** 8 Piece Precision Screwdriver Set
- **KTE2006:** 6mm Tip - 200mm Flat Screwdriver
- **KTK0707SG:** 7 Piece 1000V Screwdriver Set

Product Code	Length	Width	Depth
TKE1218N	390mm	240mm	100mm

■ Supplied in TH03914 carrying case



TKE1218N





TKE1217N

## BASIC ELECTRONIC SERVICE KIT

### Kit includes

- EP0106: 160mm Combination Pliers
- DP0106: 165mm Diagonal Cutting Pliers
- LP0106: 165mm Long Nose Pliers
- ETSC0104: 100mm Precision Diagonal Cutter
- ETLP0104: 125mm Precision Long Nose Plier
- ETBP0104: 130mm Precision Combination Plier
- UK0306: Utility Knife
- KTPS0208: 8 Piece Precision Screwdriver Set
- KTE2006: 6mm Tip - 200mm Flat Screwdriver
- KTK07075G: 7 Piece 1000V Screwdriver Set

Product Code	Length	Width	Depth
TKE1217N	390mm	240mm	100mm

- Supplied in TH03914 carrying case



TKE1219

## MAINTENANCE TOOL KIT WITH SOLDERING IRON

### Kit includes

- HV0303: 3m Tape Measure
- HK0308: Metric Hex Key Set
- EP0106: 165mm 1000V Combination Pliers
- DP0106: 165mm 1000V Diagonal Cutting Pliers
- LP0106: 170mm 1000V Long Nose Pliers
- KTK07075G: 1000V Insulated Screwdriver Set
- AS0306: 155mm Adjustable Spanner
- MTD46: Gas Soldering Iron
- SL518: Multi Core Solder
- SLM0806: Magnetic Spirit Level
- MPL0402: 3W LED Headlamp
- MPK0901N: Folding Knife

Product Code	Length	Width	Depth
TKE1219	320mm	230mm	110mm

- Supplied with TKC2 Carrying Case



TKE1214

## STARTER ELECTRICIANS KIT

### Kit includes

- LP0106: 170mm Long Nose Plier
- EP0106: 165mm Electricians Plier
- DP0106: 165mm Diagonal Cutting Plier
- KTK0306: 1000V Insulated Screwdriver Set
- KDC22: 22mm<sup>2</sup> Cross Section Cable Shear
- AS0306: 155mm Adjustable Spanner
- UKEY01: Universal Key
- UK0306: Utility Knife

Product Code	Length	Width	Depth
TKE1214	320mm	230mm	110mm

- Supplied with TKC2 Carrying Case



TKE1209

## COMPACT ELECTRICIANS TOOL KIT

### Kit includes

- LP0106: 170mm Long Nose Plier
- EP0106: 165mm Electricians Plier
- KDC22: 22mm<sup>2</sup> Cable Shear
- VNS1407: 140mm Neon Screwdriver
- HV0303: 3m Tape Measure
- SP0712P2: P2 1000V Insulated Screwdriver
- SS071205: 5.5mm Slot Head 1000V Insulated Screwdriver
- UK0306: Utility Knife

Product Code	Length	Width	Depth
TKE1209	300mm	160mm	60mm

- Supplied with TKC1 Carrying Case

## TOOL BACKPACK

### Kit includes

- EPC0109: 225mm Combination Pliers
- EP0106: 165mm Combination Pliers
- DP0108: 210mm Diagonal Cutting Pliers
- DP0106: 165mm Diagonal Cutting Pliers
- LP0108: 205mm Long Nose Pliers
- LP0106: 165mm Long Nose Pliers
- CS0338: 38mm Cable Shear
- TS0320S: Terminal Driver
- UK0306: Utility Knife
- SP1006: 160mm Wire Stripper
- HV0305: 5m Tape Measure
- AS0308: 200mm Adjustable Spanner
- VNS1407: Neon Screwdriver Tester
- HP0335: 100g Ball Pien Hammer
- HSP0606: 150mm Junior Hacksaw
- KTK0707SG: 7 Piece 1000V Screwdriver Set

Product Code	Length	Width	Depth
TBP7-9	450mm	180mm	400mm



TPB7-9

\*Image advertises 2 inserts to show the inside & outside pockets. Only 1 insert is in each tool bag.

## TOOL BACKPACK

### Kit includes

- EPC0109: 225mm Combination Pliers
- EP0106: 165mm Combination Pliers
- DP0108: 210mm Diagonal Cutting Pliers
- DP0106: 165mm Diagonal Cutting Pliers
- LP0108: 205mm Long Nose Pliers
- LP0106: 165mm Long Nose Pliers
- CS0338: 38mm Cable Shear
- TS0320S: Terminal Driver
- UK0306: Utility Knife
- SP1006: 160mm Wire Stripper
- HV0305: 5m Tape Measure
- AS0308: 200mm Adjustable Spanner
- VNS1407: Neon Screwdriver Tester
- HP0335: 100g Ball Pien Hammer
- HSP0606: 150mm Junior Hacksaw
- KTK0707SG: 7 Piece 1000V Screwdriver Set

Product Code	Length	Width	Depth
TBP5-9	450mm	180mm	400mm



TBP5-9

## ELECTRICIANS TOOL KIT

### Kit includes

- EPC0109: 225mm Combination Pliers
- EP0106: 165mm Combination Pliers
- DP0108: 210mm Diagonal Cutting Pliers
- DP0106: 165mm Diagonal Cutting Pliers
- LP0108: 205mm Long Nose Pliers
- LP0106: 165mm Long Nose Pliers
- CS0338: 38mm Cable Shear
- TSD0320S: Terminal Driver
- UK0306: Utility Knife
- SP1006: 160mm Wire Stripper
- HV0305: 5m Tape Measure
- AS0308: 200mm Adjustable Spanner
- VNS1407: Neon Screwdriver Tester
- HP0335: 100g Hammer
- HSP0606: 150mm Junior Hacksaw
- KTK0707SG: 7 Piece 1000V Screwdriver Set

### MT1881 Suggested Optional Extra

- Please refer to our Instruments Catalogue for specifications
- Not included in this kit



MT1881  
OPTIONAL EXTRA

Product Code	Length	Width	Depth
TKC3-9	410mm	320mm	100mm



TKC3-9

Supplied in TKC3 carrying case





TKC3

## LARGE ZIPPER CASE

### Features

- 600 Nylon Cordura®
- Reinforced Nylon handle
- Heavy duty zip
- Double storage space
- Two velcro closing pockets for extra tools and storage

Product Code	Length	Width	Depth
TKC3	410mm	320mm	100mm



TKC2

## MEDIUM ZIPPER CASE

### Features

- 600 Nylon Cordura
- Heavy Duty Zipper
- Multi-loop nylon straps

Product Code	Length	Width	Depth
TKC2	320mm	230mm	110mm



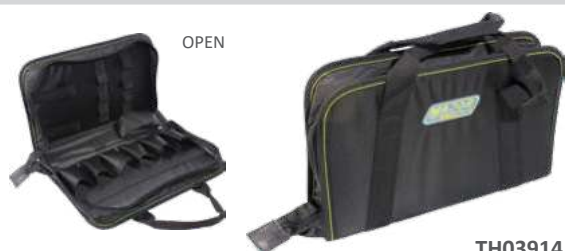
TKC1

## COMPACT ZIPPER CASE

### Features

- Heavy Duty Oxford Cloth
- Heavy Duty Zipper
- Nylon Wrist Strap

Product Code	Length	Width	Depth
TKC1	300mm	160mm	60mm



TH03914

## ZIP-UP CASE

### Features

- Heavy duty vinyl tool case with tough nylon zip
- Supplied complete with an internal elastic divider to give even more storage
- Multi-loop elastic and adjustable looped nylon straps

Product Code	Length	Width	Depth
TH03914	390mm	240mm	100mm



TBP5

## TOOL BACKPACK

### Features

- Portable workstation
- Excellent solution for installers and repair technicians that need to transport tools while still having their hands free whether for climbing ladders or carrying bulky replacement parts
- Removable sleeve with pockets of various sizes and configurations to hold a multitude of tools and small parts
- Great for HVAC, satellite/cable television, telecom/networking, stadium lighting, and wind turbine technicians or any trade where convenient hands free tool transport is desired

Product Code	Length	Width	Depth
TBP5	450mm	180mm	40mm



TBP7

## TOOL BACKPACK

### Features

- Strong Bright Yellow Tarpaulin Material
- Inner tool Board 600D Polyester
- Portable workstation
- Excellent solution for installers and repair technicians that need to transport tools while still having their hands free whether for climbing ladders or carrying bulky replacement parts
- Removable sleeve with pockets of various sizes and configurations to hold a multitude of tools and small parts

Product Code	Length	Width	Depth
TBP7	550mm	430mm	210mm



PART NO.	DESCRIPTION	PAGE NO.
AB14	Arbor - Fits 16 to 25mm Holesaws	135
AB19	Arbor - Fits 16 to 25mm Holesaws	135
AB35	Arbor - Fits 32 to 111mm Holesaws	135
AB45	Arbor - Fits 32 to 111mm Holesaws	135
AS0304	100mm Adjustable Spanner	131
AS0306	150mm Adjustable Spanner	131
AS0308	200mm Adjustable Spanner	131
AS0310	250mm Adjustable Spanner	131
AS0312	300mm Adjustable Spanner	131
BPHK0308	9 Piece Ball Point Metric Hex Key Set	128
BT140	140mm Bent Tweezer	140
C120	120mm Hex Replacement Die for HCT435	124
C150	150mm Hex Replacement Die for HCT435	124
C185	185mm Hex Replacement Die for HCT435	124
C240	240mm Hex Replacement Die for HCT435	124
C25	25mm Hex Replacement Die for HCT435	124
C35	35mm Hex Replacement Die for HCT435	124
C50	50mm Hex Replacement Die for HCT435	124
C95	95mm Hex Replacement Die for HCT435	124
CCTR50	BNC Ratchet Crimping Tool	120
CL1630	30m Chalk Line	136
CLC1620	Red Chalk	136
CS03100	240mm <sup>2</sup> Ratchet Cable Shear	126
CS0338	38mm <sup>2</sup> Cable Shear	127
CS0340	38mm <sup>2</sup> 1000V Cable Shear	109
CS03410	4 - 10mm <sup>2</sup> Coaxial Cable Stripper	128
CS0360	60mm <sup>2</sup> Cable Shear	127
CSR0380	400mm <sup>2</sup> Ratchet Cable Shear	126
CSR0400	400mm <sup>2</sup> Ratchet Cable Shear	126
CSWA01	150mm <sup>2</sup> Armoured Cable Cutter	126
CTR011	1.5 - 6mm <sup>2</sup> Universal Crimping Tool	121
CTR0310	1.25 - 10mm <sup>2</sup> Non-Insulated Crimping Tool	121
CTR03120	6 - 120mm <sup>2</sup> Hex Crimping Tool	122
CTR03150	25 - 150mm <sup>2</sup> Hex Crimping Tool	122
CTR0316	1.25 - 16mm <sup>2</sup> Non-Insulated Crimping Tool	121
CTR0323	0.5 - 6mm <sup>2</sup> Pre-Insulated Crimping Tool	121
CTR0325	6 - 25mm <sup>2</sup> Non-Insulated Crimping Tool	121
CTR0333	1.5 - 6mm <sup>2</sup> Automotive Crimping Tool	121
CTR0334	2.5 - 6mm <sup>2</sup> MC4 Solar Crimping Tool	120
CTR03650	6 - 50mm <sup>2</sup> Hex Crimping Tool	122
CTR0510	0.5 - 6mm <sup>2</sup> Bootlace Ferrule Crimping Tool	120
CTR0525	6 - 25mm <sup>2</sup> Non-Insulated Ratchet Hex Crimping Tool	121
CTR0816	0.8 - 16mm <sup>2</sup> Ratchet Crimping Tool	120
CTR1020	10 - 120mm <sup>2</sup> Adjustable Indent Crimping Tool	122
CTR156	1.5 - 6mm <sup>2</sup> Non-Insulated Hex Crimping Tool	120
CTR240	0.5 to 6mm <sup>2</sup> Economy Crimping Plier	108
CWR01	20mm <sup>2</sup> Steel Wire Cable Shears	126
D150	150mm Hex Replacement Die for HCT630	124
D185	185mm Hex Replacement Die for HCT630	124
D240	240mm Hex Replacement Die for HCT630	124
D300	300mm Hex Replacement Die for HCT630	124
D400	400mm Hex Replacement Die for HCT630	124
D500	500mm Hex Replacement Die for HCT630	124
D630	630mm Hex Replacement Die for HCT630	124
DCB115	115mm Diamond Cutting Blade	134

PART NO.	DESCRIPTION	PAGE NO.
DCB230	230mm Diamond Cutting Blade	134
DP0106	165mm 1000V Diagonal Cutting Plier	109
DP0108	200mm 1000V Diagonal Cutting Plier	109
DP160	165mm Economy Diagonal Cutting Plier	108
DP200	200mm Economy Diagonal Cutting Plier	108
DS125	4-12mm, 5 Hole Step Drill	134
DS129	4-12mm, 9 Hole Step Drill	134
DS187	6-18mm, 7 Hole Step Drill	134
DS220	4-22mm, 10 Hole Step Drill	134
DS353	6-35mm, 13 Hole Step Drill	134
ECC85	Ø85mm Battery Powered Cable Cutting Tool	123
ECT240	16 - 240mm <sup>2</sup> Battery Powered Crimping Tool	123
ECT400	16 - 400mm <sup>2</sup> Battery Powered Crimping Tool	123
EP0106	165mm 1000V Electricians Plier	109
EP0108	200mm 1000V Electricians Plier	109
EP160	165mm Economy Combination Plier	108
EP200	200mm Economy Combination Plier	108
EPC0109	230mm 1000V Electricians Plier with Crimp	109
EPC230	220mm Economy Combination Plier with Crimp	108
ETBP0104	120mm Mini Combination Plier	140
ETLP0104	120mm Mini Long Nose Plier	140
ETSC0104	120mm Mini Diagonal Cutter	140
FTS30	30m Fish Tape	136
FTS60	50m Fish Tape	136
GJP0308	200mm Groove Joint Plier	131
GJP0310	255mm Groove Joint Plier	131
GJP0312	300mm Groove Joint Plier	131
HCC45	Ø45mm Hydraulic Cable Cutter	124
HCT150	10 - 150mm <sup>2</sup> Hydraulic Crimping Tool Set	124
HCT416	16 - 400mm <sup>2</sup> Hexagon Hydraulic Crimping Tool Set	125
HCT435	35 - 400mm <sup>2</sup> Hydraulic Crimping Tool Set	124
HCT630	150 - 630mm <sup>2</sup> Hydraulic Crimping Tool Set	125
HDC0610	1.25kg Steel Club Hammer	119
HDP0316	450g Steel Ball Pein Hammer	119
HDP0320	500g Steel Claw Hammer	119
HDS0316	450g Steel Claw Hammer	119
HDT1282	Comfi-Grip™ Test Lead Set (2mm Tip), CAT IV 600V / 10A	97
HDT1284	Comfi-Grip™ Test Lead Set (4mm Tip), CAT IV 600V / 10A	97
HDT1288	Silicone Test Lead Set (4mm Tip), CAT IV 600V / 10A	97
HDT3051	Modular DMM Test Lead Set, CAT IV 600V / 10A	97
HDT3081	Modular DMM Test Lead Set, CAT IV 600V / 10A	97
HDT3907	Modular 2mm Test Lead Probes, CAT IV 600V / 10A	96
HDT3908	Modular 4mm Test Lead Probes, CAT IV 600V / 10A	96
HDT3909	36mm Wide Jaw Crocodile Clip Set, CAT III 600V / 10A	96
HDT3914	10mm Crocodile Clip Set, CAT III 600V / 10A	96
HDT3916	Pincer Clip Set, CAT III 1000V / 5A	96
HDT3917	23mm Wide Jaw Crocodile Clip Set, CAT IV 600V / 16A	96
HDT3923	Modular Sharp Tip Probe Set, CAT IV 600V / 6A	96
HDT3925	Crocodile Clip Set, CAT III 1000V / 10A	96
HDT3926	Hook Clip Set, CAT III 1000V / 2A	96
HDT821	Industrial Test Lead Set	97
HDT822	Universal Test Lead Set	97
HDT831	Electronic Test Lead Set	97
HK0308	9 Piece Metric Hex Key Set	128
HP0335	100g Steel Ball Pein Hammer	119

PART NO.	DESCRIPTION	PAGE NO.
HP700	700mm Hydraulic Pump	125
HSA0306	150mm Adjustable Hacksaw	132
HSP0312	300mm Professional Adjustable Hacksaw	132
HSP0606	150mm Junior Hacksaw	132
HV0303	3m Rubberised Tape Measure	133
HV0305	5m Rubberised Tape Measure	133
HV0375	8m Rubberised Tape Measure	133
K2002PA	2000A AC Clamp Meter, CAT III 600V	24
K2003A	2000A AC/DC Clamp Meter, CAT IV 600V	29
K2007R	600A AC TRMS Clamp Meter, CAT III 600V	24
K2009R	2000A AC/DC TRMS Clamp Meter, CAT IV 600V	29
K2031	200A AC Clamp Meter, CAT III 300V	30
K2046R	600A AC/DC TRMS Clamp Meter, CAT IV 600V	28
K2055	1000A AC/DC Clamp Meter, CAT IV 600V	28
K2056R	1000A AC/DC TRMS Clamp Meter, CAT IV 600V	28
K2210R	3000A AC TRMS Clamp Meter, CAT IV 600V	25
K2300R	100A AC/DC TRMS Open Jaw Clamp Meter, CAT III 300V	29
K2413R	100A AC TRMS Leakage Clamp, CAT III 300V	32
K2434	100A AC Leakage Clamp, CAT III 300V	32
K3005	250/500/1000V Digital Insulation Tester, CAT III 300V	36
K3007	250/500/1000V Digital Insulation Tester, CAT III 300V	37
K3007IS	Intrinsically Safe K3007, CAT III 300V	37
K3121	2.5KV Analogue Insulation Tester, CAT IV 300V	40
K3122	5KV Analogue Insulation Tester, CAT IV 300V	40
K3123	10KV Analogue Insulation Tester, CAT III 300V	40
K3125	5KV Digital Insulation Tester, CAT IV 300V	38
K3127	5KV Digital Insulation Tester, CAT IV 600V	38
K3128	12KV Insulation Tester, CAT IV 600V	39
K3131	1000V Analogue Insulation Tester, CAT III 300V	36
K3131IS	Intrinsically Safe K3131, CAT III 300V	36
K3132	1000V Analogue Insulation Tester, CAT III 300V	36
K3552	1000V Digital Insulation Tester, CAT IV 300V	37
K3552BT	1000V Bluetooth Insulation Tester, CAT IV 300V	37
K4105	0.01Ω - 2000Ω Earth Resistance Tester, CAT III 300V	48
K4106	Earth Resistivity & Resistance Tester, CAT III 300V	47
K4118	Digital Loop & PSC / PFC Tester, CAT III 300V	50
K4140	Digital Loop & PSC / PFC Tester, CAT III 300V	50
K4202	Earth Resistivity & Resistance Tester, CAT IV 300V	49
K5020	Leak/Load Current Data Logger, CAT III 300V	55
K5410	Digital RCD (ELCB) Tester, CAT III 300V	57
K5410IS	Intrinsically Safe K5410, CAT III 300V	57
K6011	Multifunction Installation Tester, CAT III 300V	46
K6024PV	PV Insulation Earth Tester, CAT IV 300V	46
K6305	True RMS Bluetooth Power Meter, CAT III 600V	54
K6315	Power Quality Analyser, CAT IV 300V	53
K6315-03	Power Quality Analyser Set, CAT IV 300V	53
K6516	Multifunction Installation Tester, CAT IV 300V	45
K6516BT	Bluetooth Multifunction Installation Tester, CAT IV 300V	45
K7058	High Voltage Insulation Tester Leads	98
K7066	Test Leads for Clamp Meters	98
K7095	Earth Resistance Leads for K4105	100
K7121	Distribution Board Leads for K4118	98
K7122	Insulation Tester Leads	98
K7126	Spare Power Plug for K4118	100
K7127	Test Leads for K4105	99

PART NO.	DESCRIPTION	PAGE NO.
K7128	Test Leads for K5410	99
K7132	Earth Probe for K6011	99
K7133	Distribution Board Leads for K6011	98
K7141	Voltage Test Lead Set for K3125	99
K7159	Fused Test Leads (4mm Tips), CAT III 1000V / 10A	98
K7165	Line Probe for K3125	99
K7168	Line Probe with Croc Clip for K3125	99
K7185	3000mm Extension Cable	99
K7221	Test Leads for K4140	99
K7224	Earth Cord for K3121, K3122, K3123, K3125, K3127, K3128	99
K7225	Guard Cord for K3121, K3122, K3123, K3125, K3127	99
K7226	Line Probe for K3128	99
K7281	Test Leads with Remote Switch	99
K8031F	Phase Rotation Meter, CAT III 300V	58
K8032	Set of Earth Spikes	100
K8035	Non-Contact Phase Rotation Meter, CAT IV 600V	59
K8112	120A AC Clamp Adaptor, CAT III 300V	24
K8115	130A AC/180A DC Clamp Sensor, CAT III 300V	31
K8121	100A Load Current Clamp Sensors	55
K8122	500A Load Current Clamp Sensors	55
K8123	1000A Load Current Clamp Sensors	55
K8124	1000A Load Current Clamp Sensors	52
K8125	500A Load Current Clamp Sensors	52
K8126	200A Load Current Clamp Sensors	52
K8127	100A Load Current Clamp Sensors	52
K8128	5A Load Current Clamp Sensors	52
K8130	1000A Load Current Flexible Clamp Sensors	52
K8133	3000A Load Current Flexible Clamp Sensors	53
K8135	50A Load Current Flexible Clamp Sensors	52
K8141	1000mA AC Leakage & Current Clamp Sensors, Ø24mm	100
K8142	1000mA AC Leakage & Current Clamp Sensors, Ø40mm	100
K8143	1000mA AC Leakage & Current Clamp Sensors, Ø68mm	100
K8146	30A Leakage & Load Current Clamp Sensors	55
K8147	70A Leakage & Load Current Clamp Sensors	55
K8148	100A Leakage & Load Current Clamp Sensors	55
K8309	Voltage Sensor for K5020	55
K8312	Power Supply Adaptor for K6305 and K6315	53
K9132	Carrying Case with Magnet for K6305 and K6315	53
K9135	Soft Carrying Bag for K5020	101
KDBNC01	BNC Ratchet Crimping Tool	120
KDC22	22mm <sup>2</sup> Cable Shear	127
KDIP01	110 Impact Punchdown Tool	139
KDKP01	Punchdown Tool	139
KDLAC01	Fibre Optic Cable Shear	127
KDRJ45R	Modular Connector Crimping Tool	120
KHS093	10 Piece Bi-Metal Holesaw Kit	135
KHS105	105mm Bi-Metal Holesaw	135
KHS111	111mm Bi-Metal Holesaw	135
KHS16	16mm Bi-Metal Holesaw	135
KHS20	20mm Bi-Metal Holesaw	135
KHS22	22mm Bi-Metal Holesaw	135
KHS25	25mm Bi-Metal Holesaw	135
KHS32	32mm Bi-Metal Holesaw	135
KHS38	38mm Bi-Metal Holesaw	135
KHS40	40mm Bi-Metal Holesaw	135

PART NO.	DESCRIPTION	PAGE NO.
KHS51	51mm Bi-Metal Holesaw	135
KHS54	54mm Bi-Metal Holesaw	135
KHS57	57mm Bi-Metal Holesaw	135
KHS64	64mm Bi-Metal Holesaw	135
KHS65	65mm Bi-Metal Holesaw	135
KHS67	67mm Bi-Metal Holesaw	135
KHS70	70mm Bi-Metal Holesaw	135
KHS73	73mm Bi-Metal Holesaw	135
KHS75	75mm Bi-Metal Holesaw	135
KHS83	83mm Bi-Metal Holesaw	135
KHS95	95mm Bi-Metal Holesaw	135
KTE0206	7 Piece Engineers Screwdriver Set	116
KTE0308	8 Piece Engineers Screwdriver Set	116
KTEP04P2	P2 Stubby Crosshead Screwdriver	118
KTES0406	6mm Stubby Slot head Screwdriver	118
KTIN0205	5mm VDE Metric Nut Driver, 1000V EN 60900	110
KTIN0207	7mm VDE Metric Nut Driver, 1000V EN 60900	110
KTIN0208	8mm VDE Metric Nut Driver, 1000V EN 60900	110
KTIN0210	10mm VDE Metric Nut Driver, 1000V EN 60900	110
KTIN0211	11mm VDE Metric Nut Driver, 1000V EN 60900	110
KTIN0212	12mm VDE Metric Nut Driver, 1000V EN 60900	110
KTIN0213	13mm VDE Metric Nut Driver, 1000V EN 60900	110
KTIN0214	14mm VDE Metric Nut Driver, 1000V EN 60900	110
KTIN0513	6 Piece Metric Nut Driver Set, 1000V EN 60900	110
KTK0306	6 Piece 1000V Electrician Screwdriver Set	117
KTK0408	8 Piece 1000V Electrician Screwdriver Set	117
KTK0707SG	7 Piece 1000V Electrician Screwdriver Set	117
KTKTSD07	7 Piece 1000V Electronic Screwdriver Set	116
KTN0309	9 Piece Nut Driver Set	131
KTPS0208	8 Piece Electronic Screwdriver Set	116
KTV150	150mm Digital Calliper	133
KV3-28	28 Piece 1000V Tool Kit	115
KV7-38	38 Piece Professional 1000V Tool Kit	115
KV-5RRS	5 Piece VDE Ratchet Ring Spanner Set, 1000V EN 60900	114
KV-5RSP	5 Piece VDE Ring Spanner Set, 1000V EN 60900	114
KV-7RSP	7 Piece VDE Open Spanner Set, 1000V EN 60900	114
KV-9SS	9 Piece VDE Ratchet Spanner Socket Set, 1000V EN 60900	114
KV-10SS	10 Piece VDE T-Handle Spanner Socket Set, 1000V EN 60900	114
LP0106	165mm 1000V Long Nose Plier	109
LP0108	200mm 1000V Long Nose Plier	109
LP160	165mm Economy Long Nose Plier	108
LP200	200mm Economy Long Nose Plier	108
MFL-90-DB12	12 Piece 3W COB LED Flashlights	142
MFL100B24	24 Piece 3W COB LED Flashlights	142
MFL140	6W LED Flashlight, 500 Lumens	142
MFL225AA	2600 Lumen, Zoomable LED Flashlight	142
MFL240D	500 Lumen, Zoomable LED Flashlight	142
MG1	Magnifying Glass	140
MGP0310	230mm Locking Plier	131
MHS16	16mm HSS Holesaw	134
MHS20	20mm HSS Holesaw	134
MHS22	22mm HSS Holesaw	134
MHS25	25mm HSS Holesaw	134
MHS32	32mm HSS Holesaw	134
MHS40	40mm HSS Holesaw	134

PART NO.	DESCRIPTION	PAGE NO.
MHS50	50mm HSS Holesaw	134
MPK0901N	Folding Utility Knife	132
MPL0402	3W COB LED Headlight, 50 Lumens	141
MPL0405	3W COB LED Headlight, 120 Lumens	141
MPL0407	3W COB LED Headlight, 150 Lumens	141
MPS80	3W COB LED Work Light, 200 Lumens	141
MSL160	3W COB LED Work Light, 210 Lumens	141
MT100	Continuity & Bell Tester	63
MT1003	1000V AC/DC TRMS Multimeter	8
MT1005	1000V AC/DC TRMS Bluetooth Multimeter	8
MT1007	1000V AC/DC IP67 TRMS Bluetooth Multimeter	9
MT1009	Bluetooth IP67 Oscilloscope & TRMS Multimeter	9
MT123	Magnetic Solenoid Tester	63
MT145	Bluetooth 20m Laser Distance Meter	91
MT150	Bluetooth 50m Laser Distance Meter	91
MT152	Bluetooth 100m Laser Distance Meter	91
MT155	Coating Thickness Tester with Data Logger	92
MT175	Video Borescope, 3.2" TFT LCD 320x240 Resolution	80
MT182	Air Quality Monitor for Temperature, Humidity & CO <sub>2</sub>	85
MT1875	6-in-1 Environmental Multimeter, CAT IV 600V	13
MT1877	1000V AC/DC IP67 TRMS Multimeter, CAT IV 600V	10
MT1881	1000V AC/DC IP67 TRMS Multimeter, CAT IV 600V	10
MT1881IS	Intrinsically Safe MT1881, CAT IV 600V	10
MT1882	1000V AC/DC IP67 TRMS Multimeter, CAT IV 600V	10
MT1883	1000V AC/DC IP67 TRMS Multimeter, CAT IV 600V	12
MT1885	1500V DC IP67 TRMS Bluetooth Multimeter, CAT IV 600V	11
MT1887	1500V DC IP67 TRMS Bluetooth Multimeter, CAT IV 600V	11
MT1887IS	Intrinsically Safe MT1887, CAT IV 600V	11
MT190	Circuit Breaker Finder, CAT IV 300V	63
MT195	Cable Locator, CAT III 300V	87
MT2005	TRMS Bluetooth Thermal Imager Multimeter, CAT IV 600V	66
MT21	600V AC/DC Compact Multimeter, CAT III 600V	14
MT222	Personal Safety HV Non-Contact Voltage Detector	42
MT22	1000V AC/DC Compact Multimeter, CAT III 600V	14
MT235	Pocket Size Battery Tester	63
MT24	1000V AC/DC Compact Multimeter, CAT III 600V	15
MT25	600V AC/DC IP67 Compact Multimeter, CAT III 600V	12
MT250	AC Voltage & Current Data Logger	55
MT26	600V AC/DC IP67 TRMS Bluetooth Multimeter, CAT III 600V	12
MT269	Personal Safety HV Non-Contact Voltage Detector	42
MT273	50V-132kV AC HV Non-Contact Voltage Detector	42
MT275	240V-500kV AC HV Non-Contact Voltage Detector	42
MT310	Digital Socket ELCB & Polarity Tester, CAT IV 300V	58
MT319	3-Phase Rotary Switch Adaptor for MT328	57
MT325	Digital RCD Tester, CAT IV 300V	58
MT328	Digital RCD (ELCB) Tester, CAT III 450V	57
MT330	20Ω - 2000Ω Earth Resistance Tester, CAT IV 600V	48
MT350	Digital Loop & PSC / PFC Tester, CAT IV 600V	50
MT390	Bluetooth Multifunction Installation Tester, CAT IV 400V	44
MT400	600V AC Non-Contact Voltage Detector, CAT III 600V	62
MT401	1000V AC Non-Contact Voltage Detector, CAT IV 600V	62
MT402	1000V AC Non-Contact Voltage Detector, CAT IV 600V	62
MT403	1000V AC Non-Contact Voltage Detector, IP67, CAT IV 1000V	62
MT405EX	Intrinsically Safe 1000V AC Non-Contact Voltage Detector	62
MT470	690V AC/220V DC LED Voltage Tester, CAT IV 600V	61



PART NO.	DESCRIPTION	PAGE NO.
MT472	690V AC/DC LED Voltage Tester, CAT IV 600V	60
MT473	1000V AC/DC LED Voltage Tester, CAT IV 600V	61
MT474	690V AC/DC LED Voltage Tester, CAT IV 600V	60
MT476	690V AC/DC LCD Voltage Tester, CAT IV 600V	60
MT478	1000A AC/DC LCD/LED Voltage Tester, CAT IV 600V	61
MT500	250/500/1000V Analogue Insulation Tester, CAT IV 600V	34
MT550	250/500/1000V Digital Insulation Tester, CAT IV 600V	34
MT560	125/250/500/1000V Digital Insulation Tester, CAT IV 600V	34
MT565	Bluetooth Insulation Tester & TRMS Multimeter, CAT IV 600V	35
MT570	500V/1000V/2.5KV/5KV Digital Insulation Tester, CAT IV 600V	41
MT575	1000V/2.5KV/5KV/10KV Digital Insulation Tester, CAT IV 600V	41
MT600	Digital Pocket Thermometer, -50°C to 200°C	75
MT605	Pen-Type Thermometer -40°C to 250°C	75
MT630	Single Input Type-K Thermometer, -200°C to 1372°C	75
MT632	Dual Input Type-K Thermometer, -200°C to 1372°C	75
MT643	USB Type-K Data Logger, -200°C to 1370°C	76
MT650	Temperature Kit with MT630, MT660, MT690 & MT651	76
MT651	Hard Carrying Case for Temperature Kits (MT650/MT652)	101
MT652	Temperature Kit with MT632, MT660, MT690 & MT651	76
MT660	General Purpose Temperature Probe, -30°C to 250°C	77
MT662	Desktop Temperature and Humidity Meter	82
MT667	Thermo-Hygrometer (-30°C to 100°C, 0 to 100% RH)	81
MT668	USB Temperature and Humidity Data Logger	81
MT669	Temperature and Humidity Data Logger	81
MT670	Surface Temperature Probe, -50°C to 500°C	77
MT675	Right Angled Surface Temperature Probe, -50°C to 500°C	77
MT680	Air Temperature Probe, -50°C to 300°C	77
MT685	Liquid Temperature Probe, -50°C to 649°C	77
MT688	Non-Contact Body Infrared Thermometer	74
MT690	Temperature Probe Kit - Incl Surface, Air & Liquid Probes	77
MT691	650°C Infrared Thermometer, Dual Laser	74
MT694	1000°C Infrared Thermometer, Multipoint Laser	74
MT700	200A AC TRMS Open Jaw Clamp/Voltage, CAT IV 600V	22
MT710	600A AC TRMS Smart Clamp Meter, CAT IV 300V	22
MT713	600A AC/DC TRMS Smart Clamp Meter, CAT IV 300V	30
MT715	200A AC TRMS Open Jaw Clamp Meter, CAT IV 600V	22
MT720	400A AC TRMS Clamp Meter, CAT III 600V	23
MT723	400A AC/DC TRMS Clamp Meter, CAT III 600V	27
MT730	600A AC TRMS Clamp Meter, CAT III 600V	23
MT740	3000A AC TRMS Clamp Adaptor, CAT IV 600V	25
MT745	3000A AC TRMS Bluetooth Clamp Meter, CAT IV 600V	25
MT760	100A AC/DC TRMS Clamp Meter, CAT III 300V	30
MT765	600A AC TRMS Clamp Meter & Thermometer, CAT IV 600V	21
MT766	600A AC/DC TRMS Thermometer Clamp Meter, CAT IV 600V	21
MT767	600A AC/DC TRMS BT Clamp Meter & Thermometer	21
MT770	1000A AC TRMS Clamp Meter, CAT IV 600V	23
MT775	1000A AC/DC TRMS Clamp Meter, CAT IV 600V	27
MT777	1000A AC/DC TRMS Bluetooth Clamp Meter, CAT IV 600V	27
MT782	1000A AC/DC TRMS Clamp Meter, CAT IV 600V	20
MT784	1000A AC/DC Thermal TRMS Clamp Meter, CAT IV 600V	19
MT785	1500V AC H & W Analysis Clamp Meter, CAT IV 600V	31
MT790	1000A AC TRMS Power Clamp Meter, CAT IV 600V	31
MT800	500V AC/DC Analogue Multimeter	16
MT801	Thermocouple Module	100
MT802	K-Type Temperature Adaptor for DMM and MT700 series	100

PART NO.	DESCRIPTION	PAGE NO.
MT805	Economy Test Leads with right angled probes (2mm Tip)	98
MT810	1m Test Leads and IP67 Plugs for MT1800 Series, CAT IV 600V	98
MT815	2m Test Leads and IP67 Plugs for MT1800 Series, CAT IV 600V	98
MT820	Economy Test Leads (4mm Tip) with Croc Clips, CAT II 600V	98
MT825	Test Lead Light	100
MT827	Soft Carrying Case for Multimeters	101
MT832	1000V AC/DC Analogue Multimeter, CAT III 300V	16
MT870	600V AC/DC TRMS Compact Multimeter, CAT III 300V	15
MT873	600V AC/DC TRMS Compact Multimeter, CAT III 300V	15
MT874	600V AC/DC TRMS Compact Multimeter, CAT III 600V	13
MT876	600V AC/DC TRMS Compact Multimeter, CAT III 600V	13
MT90	Mini Bluetooth Thermo-Anemometer	79
MT900	TDR Cable Length Meter	89
MT902	VDV Wire Tester	89
MT91	Mini Bluetooth Thermo-Hygrometer	81
MT915	2-in-1 Cable Finder & Multimeter, CAT III 600V	87
MT930	Phase Rotation Meter, CAT IV 300V	59
MT933	30Km Cable Length Meter	88
MT935	Dead Motor and Phase Rotation Meter, CAT IV 300V	59
MT940	Light Meter, 200 Lux to 200 000 Lux	80
MT941	5-in-1 Environmental Meter with Data Logger	83
MT942	LED Lux Meter, 40 Lux to 400 000 Lux	80
MT943	Lux Meter, 400 Lux to 400 000 Lux	80
MT945	Hot Wire Anemometer	79
MT948	Thermo-Anemometer with Data Logger	79
MT95	Mini Bluetooth Sound Level Meter	84
MT950	Non-Contact Tachometer	92
MT952	Contact and Non-Contact Tachometer	92
MT955	Digital Capacitance Meter, 200pF to 20mF	94
MT957	11 000 Count LCR Meter	94
MT96	Mini Particle Counter	82
MT960	Digital Moisture Meter	93
MT962	Moisture Meter with Bargraph LCD	93
MT965	Digital Vibration Meter	93
MT970	Particle Counter with data logger	82
MT975	Sound Level Meter with Data Logger	84
MT980	Refrigerant Halogen Leak Detector with Goose Neck	85
MT982	Combustible Gas Detector with Goose Neck	85
MT985	Digital Milliohm Meter, CAT III 1000V	94
MT990	Digital Process Current Calibrator	94
MTC40	Tone & Probe Tester	88
MTC45	2-in-1 Tone & Probe Tester & Multimeter, CAT III 300V	17
MTC50	2-in-1 LAN Tester & Multimeter, CAT III 300V	88
MTCT20	20mm Tungsten Carbide Holesaw	134
MTCT22	22mm Tungsten Carbide Holesaw	134
MTCT25	25mm Tungsten Carbide Holesaw	134
MTCT32	32mm Tungsten Carbide Holesaw	134
MTCT40	40mm Tungsten Carbide Holesaw	134
MTCT51	51mm Tungsten Carbide Holesaw	134
MTCT64	64mm Tungsten Carbide Holesaw	134
MTCT73	73mm Tungsten Carbide Holesaw	134
MTCT76	76mm Tungsten Carbide Holesaw	134
MTCT83	83mm Tungsten Carbide Holesaw	134
MTD1	300ml Butane Gas Lighter Refill	137
MTD10	600V AC/DC Compact Multimeter, CAT III 300V	16

PART NO.	DESCRIPTION	PAGE NO.
MTD15	400A AC/DC Clamp Meter, CAT III 600V	26
MTD46	Gas Soldering Iron	137
MTD48	Gas Soldering Iron Kit	137
MTD70T	600A AC TRMS Clamp Meter, CAT III 600V	26
MTD73A	800A AC TRMS Clamp Meter, CAT III 600V	26
MTD75T	800A AC/DC TRMS Clamp Meter, CAT III 600V	30
MTD80	600V AC/DC TRMS Compact Smart Multimeter, CAT III 600V	16
MTD81	TRMS Compact Multimeter, CAT III 600V	14
MTD84	TRMS Compact Smart Multimeter, CAT III 600V	14
MTD90	2-Way Radio & FM Receiver	118
MTi11	80 x 80px Bluetooth Thermal Imager	71
MTi13	80 x 80px Bluetooth Thermal Imager	70
MTi15	160 x 120px Bluetooth Thermal Imager	69
MTi50	160 x 120px Bluetooth Thermal Imager	68
MTi60	384 x 288px Bluetooth Thermal Imager	67
MTiB12	80 x 80px Bluetooth Body Thermal Imager	72
MTK15	Electrical Contractors Test Kit	64
MTK25	Electrical Contractors Test Kit	64
MTK35	Electrical Contractors Test Kit	64
MTK45	Electrical Contractors Test Kit	64
MTKBAG	Heavy Duty Meter Bag	101
MTMAG	Rubber Magnetic Strip to Hang Select Meters	100
PD1	Pilot Drill for AB19, AB35 & AB45	135
PD2	Pilot Drill for AB14	135
PIM1	360° Swivel Inspection Mirror	139
RSS22	22 Piece Ratchet Socket Set	130
RSS27	27 Piece Ratchet Socket Set	130
RSS34	34 Piece Ratchet Socket Set	130
RWS06	6 Piece Ratchet Wrench Set	130
SB0306	10x Spare Blades for UK0306	132
SH175	Spring Hook	139
SI30	30W Electric Soldering Iron	138
SI60	60W Electric Soldering Iron	138
SI100	100W Electric Soldering Gun	138
SIS100	48W Electric Soldering Station	138
SIS200	60W Electric Soldering Station	138
SL518	18g Multicore Solder (1mm)	137
SL5200	200g Multicore Solder (1mm)	137
SLM0806	200mm Magnetic Spirit Level	133
SLM24	600mm Spirit Level	133
SP1006	160mm 1000V Wire Strippers	109
SP160	160mm Economy Wire Strippers	108
SS1	Solder Sucker	137
SSC1	Sharp Point Scissors	139
STS0304	4 Piece Stainless Steel Tweezer Set	140
TBP5	Tool Backpack	146
TBP5-9	23 Piece Electricians Tool Backpack	145
TBP7	Yellow Tarpaulin Tool Backpack	146
TBP7-9	23 Piece Electricians Tool Backpack	145
TDM0540	40 Piece Metric Tap & Die Set	136
TH03914	Zip Up Tool Case	146
TKC1	Compact Zipper Carrying Case	146
TKC2	Medium Zipper Carrying Case	146
TKC3	Large Zipper Carrying Case	146
TKC3-9	23 Piece Electricians Tool Kit	145

PART NO.	DESCRIPTION	PAGE NO.
TKE1208	17 Piece Tool Kit with MT870 Multimeter	143
TKE1209	9 Piece Compact Electricians Tool Kit	144
TKE1210	17 Piece Tool Kit with MT720 Clamp Meter	143
TKE1211	18 Piece Tool Kit with MT876 Multimeter	143
TKE1214	14 Piece Starter Electricians Tool Kit	144
TKE1217N	24 Piece Electronic Tool Kit	144
TKE1218N	25 Piece Electronic Tool Kit with MT870 Multimeter	143
TKE1219	19 Piece Maintenance Tool Kit with Soldering Iron	144
TS015	Tin Snip Cable Shears	127
TSD0320P	PZ2 Terminal Screwdriver	118
TSD0320S	3.5mm Terminal Screwdriver	118
TSD0407	6mm 1000V Terminal Screwdriver	118
TT1	4-in-1 Trimming Tool	140
UK0306	Retractable Utility Knife	132
UKEY01	Universal Key	133
VAS0108	200mm VDE Adjustable Spanner, 1000V EN 60900	111
VAS0110	250mm VDE Adjustable Spanner, 1000V EN 60900	111
VB03	3mm VDE L-Wrench Hex Key, 1000V EN 60900	111
VB04	4mm VDE L-Wrench Hex Key, 1000V EN 60900	111
VB05	5mm VDE L-Wrench Hex Key, 1000V EN 60900	111
VB06	6mm VDE L-Wrench Hex Key, 1000V EN 60900	111
VB08	8mm VDE L-Wrench Hex Key, 1000V EN 60900	111
VB10	10mm VDE L-Wrench Hex Key, 1000V EN 60900	111
VCSS0108	38mm <sup>2</sup> VDE Cable Shear, 1000V EN 60900	113
VEB125	125mm ½" VDE Ratchet Extension Bar, EN 60900	111
VEB250	250mm ½" VDE Ratchet Extension Bar, EN 60900	111
VHSJ0106	270mm VDE Adjustable Hacksaw, 1000V EN 60900	113
VHSL0112	460mm VDE Adjustable Hacksaw, 1000V EN 60900	113
VNS1407	140mm Neon Screwdriver, Detects Voltage	118
VNS1410	200mm Neon Screwdriver, Detects Voltage	118
VOSP07	7mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP08	8mm VDE VDE Single Open Spanner, 1000V EN 60900	112
VOSP10	10mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP11	11mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP12	12mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP13	13mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP14	14mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP15	15mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP16	16mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP17	17mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP18	18mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP19	19mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP21	21mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP22	22mm VDE Single Open Spanner, 1000V EN 60900	112
VOSP24	24mm VDE Single Open Spanner, 1000V EN 60900	112
VRA125	250mm (½") VDE Ratchet Socket Spanner, 1000V EN 60900	110
VRRS10	10mm VDE Ring Gear Wrench, 1000V EN 60900	112
VRRS11	11mm VDE Ring Gear Wrench, 1000V EN 60900	112
VRRS12	12mm VDE Ring Gear Wrench, 1000V EN 60900	112
VRRS13	13mm VDE Ring Gear Wrench, 1000V EN 60900	112
VRRS14	14mm VDE Ring Gear Wrench, 1000V EN 60900	112
VRRS17	17mm VDE Ring Gear Wrench, 1000V EN 60900	112
VRRS19	19mm VDE Ring Gear Wrench, 1000V EN 60900	112
VRSP07	7mm VDE Ring Wrench, 1000V EN 60900	112
VRSP08	8mm VDE Ring Wrench, 1000V EN 60900	112



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