

**TEST AND
MEASUREMENT
FROM MEGGER**

Megger[®]

TEST AND MEASUREMENT



EN

ENGLISH
US & CAN

MPAC128 & MPAC128-ATEX

ACOUSTIC IMAGER



MPAC128-ATEX
Item no.
1015-885

MPAC128
Item no.
1015-886

- 128 Microphone array
- Detection frequency up to 48 kHz
- Detection range up to 120 m
- 8 MP Optical camera resolution
- Display rate of 25 fps
- Detects multiple gas types
- Leak rate quantification
- Phase resolved partial discharge (PRPD)
- Ultrasonic monitoring
- Expandable memory storage
- IP54 rating



Reducing costs and risks while maximizing workplace effectiveness. Protect your site, people, profits, and productivity from threats that are invisible to the naked eye.

The MPAC-128 from Megger is the new state-of-the-art acoustic imager which visualizes gas leaks and partial discharge with unrivaled clarity - helping you address issues before they lead to safety incidents, compliance violations, equipment damage, resource wastage and costly unplanned downtime.

Megger's ATEX-certified and IP54-rated acoustic imager offers non-contact detection up to a distance of 120 meters, aiding safe and fast diagnosis.

MIT SERIES

INSULATION RESISTANCE MEASURING INSTRUMENTS



Regular insulation resistance testing is one of the most cost effective, non-destructive methods of identifying aging in electrical equipment. With over 60% of equipment failures being ascribed to insulation breakdown, it is a key area to monitor. Diagnostic DC testing is probably the easiest and most convenient method of achieving this due to the small size and weight of the equipment, and with Megger's advanced Guard Terminal technology, you can reliably avoid measurement inaccuracies due to leakage currents.

Electrical insulation testing needs have existed as long as electrical assets themselves. Well-chronicled deficiencies of early insulation systems became apparent almost immediately after the first lighting systems were laid over 125 years ago. Although insulation systems have evolved significantly since then, the need to test them never goes away. The consequences of failure are too high.

The first DC portable insulation tester was developed in 1889 by our founders, Sydney Evershed and Ernest Vignoles, and by 1903 was being sold as a Megger insulation tester.

Experience the exceptional accuracy, repeatability and reliability of these test instruments. With Megger's advanced Guard technology you can reliably and quickly avoid inaccurate readings due to leakage currents.

	MIT400/2	MIT410/2	MIT420/2	MIT430/2	MIT481/2	MIT485/2	MIT2500	MIT515	MIT525	MIT1025	MIT1525
Test voltages											
10 kV / 15 kV										■	■
5 kV								■	■	■	■
2,5 kV							■	■	■	■	■
1000 V	■	■	■	■	■	■	■	■	■	■	■
500 V	■	■	■	■	■	■	■	■	■	■	■
250 V	■	■	■	■	■	■	■	■	■		
50 V / 100 V		■	■	■	■	■	■				
10 V - 100 V											
Insulation - Test methods											
Polarization index		■	■	■	■	■	■	■	■	■	■
Dielectric absorption ratio		■	■	■	■	■	■		■	■	■
Step voltage/ramp									■	■	■
Dielectric discharge									■	■	■
Further tests											
Continuity check	■	■	■	■	■	■	■				
Frequency measurement		■	■	■	■	■	■				
Capacity measurement			■	■	■	■	■	■	■	■	■
Voltage measurement	■	■	■	■	■	■	■	■	■	■	■
Memory and interfaces											
Data memory			■	■	■	■	■		■	■	■
USB interface									■	■	■
Bluetooth interface				■		■	■				
Supply											
Mains Power supply									■	■	■
Rechargeable batteries	▲	▲	▲	▲	▲	▲	▲	▲	■	■	■
Security											
CAT III / 600 V											
CAT IV / 600 V	■	■	■	■	■	■	■	■	■	■	■
Interference resistance											
Calibration certificate included	■	■	■	■	■	■	■	■	■	■	■
Software included				■			■				
Power DB Lite									■	■	■
Power DB									□	□	□
Guard Terminal							■	■	■	■	■

■ Included □ Option ▲ Rechargeable batteries possible

MIT400/2



Item no. **1004-731**

- Designed for Electrical and Industrial testing
- Insulation testing up to 1000 V and 200 G Ω range
- 600 V Trms AC and DC voltage measurement
- Live circuit detection and protection
- Adjustable insulation test voltage from 10 V to 1000 V
- Single range, faster continuity testing from 0.01 Ω to 1 M Ω
- CAT IV 600 V and IP54

Included accessories: Red/Black Silicone test leads with Probes + Clips, Batteries 6 x AA Alkaline, Hard carry case, Calibration certificate

MIT420/2



Item no. **1004-739**

- Insulation testing up to 1000 V and 200 G Ω range
- Stabilized insulation test voltage
- Single range, faster continuity testing from 0.01 Ω to 1 M Ω
- 600 V TRMS AC and DC voltage measurement
- Live circuit detection and protection
- User variable insulation test voltage from 100 V to 1000 V
- Test result storage and Bluetooth[®] downloading
- CAT IV 600 V & IP54

Included accessories: Red/Black Silicone test leads with Probes + Clips, remote switch probe, Batteries 6 x AA Alkaline, Carry case

MIT485/2



Item no. **1004-742**

- Specialist Telecoms IR tester
- Insulation testing up to 500 V and 100 G Ω range in a handheld instrument
- 3 wire connection for A, B and E (Tip, Ring and Earth) connection
- Gated access to 500 V to prevent accidental damage
- Single range, fast continuity testing from 0.01 Ω to 1 M Ω
- Stabilized insulation test voltage
- 600 V Trms AC and DC voltage measurement
- Test result storage and Bluetooth[®] downloading
- CAT IV 600 V and IP 54

Included accessories: Red/Black silicone test leads with prods and clips, SP5 Switched probe, Batteries 6 x AA Alkaline, Hard carry case

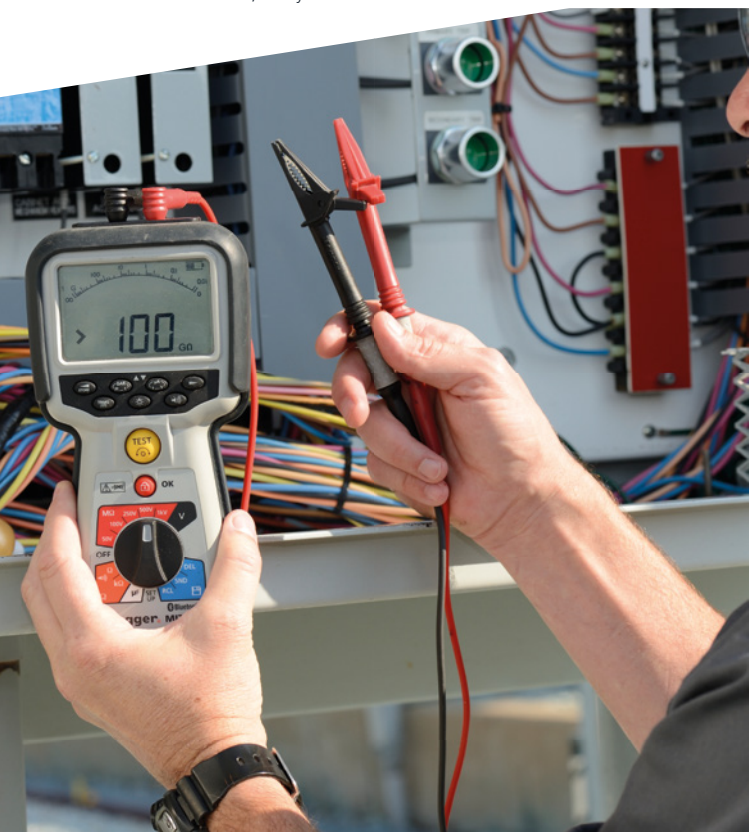
MIT2500

Item no. 1004-745



- Insulation testing up to 2.5 kV and 200 G Ω range in a handheld instrument
- Guard terminal for high resistance accuracy
- Adjustable insulation test voltage from 50 V to 2500 V
- Stabilized insulation test voltage
- Rechargeable options for mains and car charging
- Single range, faster continuity testing from 0.01 Ω to 1 M Ω
- Polarization Index (PI) and Dielectric Absorption Ratio (DAR)
- CAT IV 600 V applications

Included accessories: Red/Black/Blue silicone test leads with prods and clips, 2.5 kV Red/Black/Blue silicone test leads with clips, Owner's Information CD, Batteries 6 x AA Alkaline, Carry Case



MIT515 MIT525

MIT515 Item no.
1001-937

MIT525 Item no.
1001-941



- Insulation measurement up to 5 kV DC
- Measuring range to 10 TΩ (MIT515)
- Measuring range to 20 TΩ (MIT525)
- Diagnostic function PI, DAR, DD and ramp test
- Li-ion battery, high capacity, fast charging
- Test category CAT IV / 600 Volt
- Robust impact-resistant outdoor carrying case, protection class IP65
- Operational up to 3,000 m above sea level
- Light and compact only 4.5 kg
- Measurement with discharged battery - with simultaneous charging at the mains

Included accessories: Power cord, USB cable, lead set 3 m, medium sized insulated test clamps



MIT1025

MIT1525

MIT1025 Item no.
1001-945

MIT1525 Item no.
1002-908



- Insulation measurement 100 V to 10 kV DC (MIT1025)
- Insulation measurement 40 V to 15 kV DC (MIT1525)
- Measuring range to 20 TΩ (MIT1025)
- Measuring range to 30 TΩ (MIT1525)
- PI, DAR, DD, SV and ramp test
- Battery and mains operation (while the battery is charging)
- Li-ion battery, high capacity, fast charging
- Quick charge function
- Automatic date function
- CAT IV 600 V
- Internal memory with data logger at 5-second intervals or real-time transmission via USB interface with one measurement per second

Included accessories: Mains cable, USB cable, product information CD, 3 lead sets of 3 m each with large insulated clamps (MIT1025 only), 3 cable sets of 3 m each with large insulated clamps (15 kV, MIT1525 only)



S1 SERIES

INSULATION RESISTANCE MEASURING INSTRUMENTS



Megger's S1-Series of insulation resistance testers consists of 5 kV, 10 kV and 15 kV models called S1-568, S1-1068 and S1-1568. These class-leading instruments are targeted at power utilities and service companies working in generation, transmission and distribution markets. Class leading charge current, noise rejection and software filters make the S1-Series Megger's most advanced DC insulation resistance testers to date.

Instrument productivity is a focus of the S1-Series which offers rapid charge batteries and operation from an AC source when the battery is flat. An intuitive user interface ensures no lost time remembering how to use the tester. Simplicity of operation is achieved with two rotary switches and a large backlight display which enables multiple results to be displayed simultaneously. A graphical quick start guide is provided inside the lid of each model to assist first time users.

Safety of operation is built in - 5 kV and 10 kV models are safety rated to CAT IV 600 V up to 3000 m and the 15 kV S1-1568 is rated at CAT IV 1000 V up to 4000 m. Original equipment manufacturers and repairers will welcome the remote control feature allowing them to

automate resistance testing on the factory floor, as will technicians in substations wanting to operate from a more convenient, safe distance.

The S1-Series have a dual case design with a tough outer case to protect the tester from knocks and drops and a fire retardant inner case. The case IP rating prevents moisture and dust ingress when storing or carrying the instrument. The lids have clip-on lead pouches ensuring that leads remain with the instrument at all times. Case lids are removable for improved access to the terminals.



S1-568 Item no.
1003-018

S1-1068 Item no.
1003-009

S1-1568 Item no.
1002-893

- Resistance measurement: 15 T Ω - 5 kV
- 35 T Ω - 10 kV, 35 T Ω - 15 kV
- High current – 6 mA short circuit current
- High noise immunity – 8 mA of noise rejection
- Four software filters: 10 s, 30 s, 100 s, 200 s
- Li-ion battery – charges in 2 hours and gives up to 6 hours continuous testing a 100 M Ω load (S1-568), battery meets IEC 62133
- CAT IV 600 V safety rating up to 3000 m (S1-568, S1-1068)
- CAT IV 1000 V safety rating up to 4000 m (S1-1568)
- Remote operation via USB cable
- Download of memory via isolated USB cable Bluetooth®
- IR, timed IR, DAR, PI, DD, SV and ramp diagnostic tests
- Large LCD display with backlight
- Dedicated voltmeter function (30 V to 660 V) AC or DC
- Advanced memory, on-screen recall and real time clock for date/ time stamped results
- PowerDB Lite asset management compatibility
- Option to record temperature and/or relative humidity with saved results (measured independently)

Included accessories: Safety Warning Sheet, Product information CD, Power lead, Screened USB cable with filters, Remote control indicator beacon, 5 kV, 3 m x 3, medium insulated clips - S1-568 and S1-1068 only
10 kV, 3 m x 3, large insulated clips - S1-1068 only
15 kV, 3 m x 3, X-large insulated clips - S1-1568 only

DLRO 10HD 10HDX

MICRO OHMMETER WITH 10 A TEST CURRENT



Augmenting Megger's DLRO10 and 10X range, the DLRO10HDX combines ultimate simplicity of operation with a rugged IP65 case designed for stable ground and bench operation and provides memory storage.

These units are powered from either rechargeable battery or mains power, making it suitable for continuous testing in production line/repetitive use environments.

Rotary switch controls are simple and easy to operate in all weather conditions and with gloved hands. A large, clear, backlit LCD display is easy to read from a distance.

The DLRO10HDX provides significantly enhanced compliance and is capable of delivering 10 A into measurements up to 250 m Ω and 1 A into measurements up to 2.5 Ω . The duration of each test may be up to 60 seconds.

The DLRO10HDX is rated CAT III 300 V provided the optional terminal cover is fitted to the instrument.

The DLRO10HDX provides five test modes each of which is selected through a simple rotary control on the Mode selection rotary switch. All memory functions, delete, download to PowerDB and recalling test results are also accessible via the Range Selection rotary switch.

A simple control panel enables easy navigation for configuration settings.

DLRO10HD
Item no.
1006-603

DLRO10HDX
Item no.
1008-047

- Simple rotary switch selection of five test modes, including auto start on connection, a high resolution of up to 0.1 micro-ohms, a basic accuracy of up to 0.2 percent and a special mode for measurements on inductive test objects
- Automatic start function
- Resolution up to 0.1 $\mu\Omega$, measuring range up to 2,500 Ω
- Test current 0.1 mA up to 10 A
- High or low output power selection for condition diagnosis
- Protected to 600 V, test lead live voltage warning light
- Operates from battery or AC mains supply
- Heavy duty case: IP 65 lid closed, IP54 operational
- Onboard memory storage for test results up to 200 records (HDX only) Download to PowerDB
- Interchangeable test lead terminations

Included accessories: Printed short manual, Schuko power supply cable



DLRO100 SERIES

DIGITAL LOW RESISTANCE OHMMETERS



DLRO100 EB
Item no.
1004-874

DLRO100 XB
Item no.
1004-914

DLRO100 HB
Item no.
1004-954

- CAT IV 600 VAC / 500 VDC for safe operation
- Lightweight 100 A battery powered unit for portability
- High noise immunity for stable readings
- Smooth DC Output for circuit breaker testing
- IP54 for protection against dust and moisture while testing
- Save, download and delete results (100X/H variants)
- Remote operation, Bluetooth® & asset/result tagging (100H variants)

Included accessories: Certificate of Test, Quick Start Guide, Calibration Certificate, Mains lead, USB Cable (X, H variants only)

The Megger Ducter™ DLRO100 enables low resistance measurement across multiple applications in areas without access to mains power. The integral Li-ion battery supplies a constant 100 A current for up to 200 automatic or manual tests enhancing productivity in remote locations.

With a focus on user safety, advanced design features ensure the safe operation of the instrument in the most adverse conditions, including a CAT IV 600 V safety rating in accordance with IEC61010. A DualGround feature is available on the DLRO100XB and DLRO100HB, which adds to the operator's safety by grounding both sides of the breaker under test.

The tough design, intuitive interface and IP54 (lid open) rating ensure reliability and ease-of-use in the most arduous of conditions.

DLRO100

FEATURES				BENEFITS
	EB	XB	HB	
CAT IV 600 VAC / 500 VDC up to 2000 m, CAT IV 300 V up to 4000 m	■	■	■	On all test terminals for safe operation
Lightweight 100 A battery powered unit	■	■	■	Easily portable – 7.9 Kg (17 lbs) with battery
High noise immunity	■	■	■	For stable readings in noisy environments
Smooth DC Output	■	■	■	Circuit breaker testing
IP54 Lid open IP65 Lid closed	■	■	■	For protection against ingress during operation (lid open) and storage (lid closed)
Li-ion battery	■	■	■	Always ready to test with a Li-ion fast charge battery - 2.5 hours charge time from fully discharged. Works from an AC supply if the battery is fully discharged. Battery capacity - 200 single tests or up to 2x 10 minutes continuous 100 A output for extended use.
100A Manual, Auto and Continuous test	■	■	■	Quick selection of test modes for different applications with 4 terminal measurement for flexibility
Custom test	■	■	■	Adjustable current 10 - 110 A, ramp rates configurable from 0.5s upto 30s and configurable test duration for flexibility
Range and test mode rotary switches	■	■	■	Quick and easy selection of current ranges and test modes
DualGround™		■	■	Using the optional DC clamp enables circuit breaker testing with ground protection in place for safety
Internal memory storage with USB download capability		■	■	For effective results management, up to 220 time and date stamped records
Remote Control			■	Control the instrument remotely over USB via a PC or laptop for added safety
Asset tagging			■	Running a PowerDB app on Windows tablet or smart phone to populate unique asset IDs for efficient asset management
Bluetooth®			■	For effective wireless communication. For download and asset tagging

DLRO²_{2X}

2A MICRO-OHMMETER FOR MEASURING THE SMALLEST RESISTANCES BETWEEN ELECTRICAL CONNECTIONS



The DLRO2 series are tough, hand-held 2 A low resistance ohmmeters. They are designed to provide fast, accurate, repeatable measurements, even in electrically noisy locations. The DLRO2 is the latest in a long line of instruments to proudly display the Ducter™ brand, the Ducter™ testers being as well-known and relied upon as Megger insulation resistance testers.

For the utility or industrial user, a high level of safety is provided with a CAT III 600 V/CAT IV 300 V rating to IEC61010. In addition, the instrument can protect itself from inadvertent connections up to 600 V without blowing a fuse, thereby avoiding essential time lost due to repairs or finding a replacement fuse.



DLRO2
Item no.
1012-280

DLRO2X
Item no.
1013-795

- Noise Rejection mode with Confidence Meter™ (DLRO2X)
- Manual and auto save results for export to USB (DLRO2X)
- 'Difference Meter' for quick data comparisons
- Use very long test leads at 1 A using dedicated test mode
- Safely test the resistance of inductive loads at 1 A
- <600 V active protection against inadvertent live connections without blowing a fuse
- Ideal for outdoor use with protection against dust and moisture to IP54
- Industry standard safety rated at CAT III 600 V / CAT IV 300

Included accessories: Kelvin clip lead set 2m CAT IV 300 10 A, kelvin probe lead set 2m CAT IV 300 10 A, 240 V charger power supply, six Batteries: 1.2 V NiMH AA 2000mAh, USB memory stick (with user guide), hanging hook and strap, soft pouch

When working outside, the IP54 rating ensures that neither rain nor dust will prevent testing.

The DLRO2 measures low resistance values across a wide range of applications, from railways and aircraft, to the resistance of industry components.

Applications requiring long test leads are not a problem for the DLRO2 as it has a dedicated long lead test to optimize the output. The long test lead function is able to provide up to 1 A of test current into 3.2 ohms resistance. This makes the DLRO2, with its optional cable reel test leads, ideal for testing wind turbine and avionic lightning protection applications.

To allow testing of smaller inductive loads, the DLRO2 can apply 1 A for at least 15 seconds, made possible by the high-capacity built-in rechargeable batteries, together with a separate inductive load function. The batteries can be fully recharged in 2.5 hours, minimising downtime.



EXAMPLE APPLICATIONS

Aviation – Lightning protection testing measuring $m\Omega$ resistance between receptors, wing tip to wing tip etc., using long test leads. Optional long cable reel test leads are available, can be used for assembly of components, interconnection of equipment, repair, and maintenance.

Wind turbines – Lightning protection, measuring $m\Omega$ resistance between wing tip to ground connection at base using long test leads. Optional long cable reel test leads are available.

Rail, tram and underground – Rolling stock and infrastructure, track high current joints, signalling systems.

Marine – Power wiring systems, protection systems, ship-to-shore bonding, cathode protection system testing, and cable laying applications.

Oil and gas pipelines – Bonding between welded joints and grounding systems.

Automotive and EV – Battery connections, weld quality, crimped connections quality, assembly robot welding cables.

Cable manufacturers – Quality control, cable length.

Component manufacturers – Quality control.

Space exploration and engineering – Structural metal to metal, ground network metal to metal, carbon fiber to metal, carbon fiber to carbon fiber.

Data centres – During electrical installation of main panel, generator, and UPS centers. Verification of protective device contact resistance, busbar parallel feeds, busbar lapped joints, optimum resistance over torque, and cable lug to busbar connections. During maintenance using trending data for all aspects of the above, verification after repair.

Medical hand-held opportunity – Earthing and bonding systems for protection against microshock and macroshock.

Panel/switchgear manufacturers – End of production line testing, site commissioning, maintenance, and fault finding.

Robotics – Wiring systems and connections which are subject to stress/movement/vibration, bonding of component parts to minimize static, grounding of machine, welding leads of robot spot welder.

Electrical infrastructure – Cable resistance from one end, cable length, identification of parallel supplies while connected, cable to lug to connection fault finding. Checking assembled connections main supply cables and panels, switchgear and protective devices, UPS and changeover panels, interlinking busbars, interlinking cables, distribution and PDU boards, lightning protection systems, final circuits.

Photovoltaic Installations – Test contact resistance of any ground connection including busbars, and in combination of the KC long test leads can test entire long distance strings.

KC SERIES TEST LEADS

WIND TURBINE LIGHTNING PROTECTION TEST LEAD SETS



KC100
Item no.
1000-809

(900 m Ω)
1x 100 m / 1x 6 m

KC60
Item no.
1001-248

(500 m Ω)
1x 60 m / 1x 6 m

KC30
Item no.
1001-249

(250 m Ω)
1x 30 m / 1x 6 m

- Developed in conjunction with a leading manufacturer of wind turbines
- Allows easy and reliable measurement of lightning protection circuit resistance of wind turbines
- Available in three lengths, 30 m, 60 m and 100 m to suit both manufacturing and maintenance applications
- Long cable fitted on strong metal framed cable reel
- Cable reel fitted with friction brake to avoid tangles when paying out cable emfs
- Uses duplex connect test lead system

The KC-series of test leads provides a complete and convenient solution to the problem of finding reliable test leads that are long enough for testing the continuity of lightning protection conductors in wind turbines.

KC-series wind turbine test leads are available in 330 ft, 200 ft and 100 ft (100 m, 60 m and 30 m) versions that are equally suitable for use on site or in the manufacturing plant. All lead set versions are 10 A rated.

DET2/3

ADVANCED DIGITAL EARTH RESISTANCE TESTER



Item no. **1008-944**

- High resolution of 1 m Ω , ideal for large grounding systems
- Versatile test methods according to Wenner or Schlumberger
- High accuracy for ground resistivities and ground resistance tests
- Rechargeable batteries, operating time up to 10 hours and quick recharge
- Robust device with protection class IP65
- Automatic or manual selection of test current frequencies with filter and noise suppression
- Diagnostic curve display
- Data storage

Included accessories: Operating manual on USB stick, calibration certificate, charger, calibration checkbox 25 Ω , lid pocket

The DET2/3 high resolution earth tester is a robust and compact automatic earth/ground test instrument designed to measure earth electrode resistance and soil resistivity. For use on large or more complex earth systems, which include communications earth systems and difficult test environments, it can be used to test in accordance with BS 7430 (earthing/grounding), BS-EN-62305 (lightning protection), BS-EN-50122-1 (railway applications), and IEEE Standard 81.

EARTH TEST KIT

ELECTRODE & SOIL RESISTIVITY STAKE AND WIRE KIT



ETK30 Item no.
1010-176

ETK50 Item no.
1010-177

ETK100 Item no.
1010-178

ETK50C Item no.
1010-179

ETK100C Item no.
1010-180

- Accessory kits to complete earth electrode testing and soil resistivity surveys
- Can be used with any of the DET2/2, DET2/3, DET3 or DET4 Megger earth testers
- Easy wind and unwind reels
- Easy to use, easy pack away
- Earth test spikes on reels
- Supplied with holdall bag for easy transportation
- Multiple lengths to meet all needs

Test frequency, test current, and filtering can be quickly and easily adjusted so that adverse conditions, which can influence the test, can be overcome, and a wide band of test current frequencies, with a resolution of 0.5 Hz, can be used to eliminate errors caused by noise in the earth.

With its microprocessor controlled system it provides a flexible and 'user-friendly' approach to earth/ground tests by the provision of excellent error detection capabilities and full test information shown on a large color display. The DET2/3 can provide a live trace of its measurements, which graphically shows the amount of noise from the system under test - a powerful diagnostic tool for the expert earth/ground test engineer.

The DET2/3 also includes an automatic frequency selection feature that scans for frequencies with the lowest noise level and then runs a test at that frequency. The selected test current frequency, test current level, and the increased filtering option are stored in memory for use in subsequent tests.

DET 14C 24C

DIGITAL EARTH CLAMPS



The DET14C and DET24C represent a new generation of earth/ground clamp-on resistance testers. These instruments induce a test current into earth systems and measure ground resistance in multi ground installations without needing to disconnect the ground. They offer market leading access, advanced features, simple operation and CAT IV 600 V safety protection.

DET14C
Item no.
1000-761

DET24C
Item no.
1007-331

Bluetooth® & Advanced
memory functionality

- Elliptical clamp shape improves access to earthing cables and tapes up to 50 mm
- Low maintenance, flat jaw surface
- Measures the ground resistance from 0.05 Ω to 1500 Ω
- Measures the effective value of the earth leakage current from 0.5 mA rms to 35 A rms.
- CAT-IV-600-V safety rating
- Backlit LCD display
- Measure the grounding resistance in multi-ground installations without the need to disconnect the ground connection
- The flat jaws help prevent dirt deposits
- In electrically noisy environments, the built-in filter function provides increased immunity to interference

Included accessories: Detailed manual CD-ROM, carrying strap (arm loop), calibration loop, carrying case



Designed with flat core ends, they prevent dirt build up, ensuring measurement integrity and improved reliability over products with interlocking teeth. Other enhancements over current generation products include improved accuracy and up to 300% increase in battery life. In electrically noisy environments the built-in filter function offers increased noise immunity.

DET14C and DET24C also offer a true RMS AC current measurement facility up to 35 Amps. The instrument's ability to measure current flowing in an earth cable is a useful safety feature, especially if the earth cable has to be disconnected. A high current flow to earth could draw an arc on disconnection with potentially severe consequences.

The elliptical shaped head design offers improved access to cables and earth straps in space constrained locations. The clamp head accommodates up to 37 mm diameter cable and 50 mm earth tapes making them suitable for use in power stations, substations, towers and many more facilities. Operation in dark and restricted areas is facilitated by a display with backlight and an audible tone associated with the hold key. Optimized jaw opening mechanism ensures proper jaw closure without excessive use of force when opening the jaws.

DET SERIES

GROUND RESISTANCE
MEASURING INSTRUMENTS



DET3TD
Item no.
DET3TD

- 2 and 3 point testing
- Warning indicators prevent test failure
- IP54 rated
- Complete with leads, stakes, and rugged carry case
- Simple one button operation
- Calibration test certificate included

Included accessories: Hard carry case, Stake and wire kit

DET4TD2
Item no.
1000-347

- 2, 3 and 4-wire earth test
- Specific earth resistance test
- Robust housing, protection class IP54
- Complete with test leads and ground spikes
- Robust carrying case

Included accessories: Printed quick start guide, full manual on CD, calibration certificate, 4-wire earth test kit (3m, 10m, 10m & 15m) with stakes, right angle terminal adapters and hard carry case

The ground testing instrument family from Megger offers a unique solution to your ground rod testing needs. The complete kit of instrument, test leads, stakes, batteries and calibration certificate are delivered in a tough polypropylene carry case - everything you need to start testing in one kit.

The ground tester is rated to IP54, making it truly an outdoor instrument. The ground tester has been designed to be easy to use - a large selector switch makes selection of 2 and 3 pole test easy with gloved hands - and the design makes the fitting of shorting links to perform 2 pole tests a thing of the past. A large, clear, easy to read LCD display and thumb sized test button again makes the instrument particularly suited to the outdoor conditions of ground testing.

In addition to this ease of use, the ground tester also automatically checks the connection and condition of the P and C spike, indicating the status on the display. The instrument also includes a voltmeter to allow you to measure the ground voltage. The ground tester can measure resistance from 0.01 Ω through to 2000 Ω and earth voltages up to 100 V. To allow accurate testing in noisy environments the instrument is capable of rejecting noise of up to 40 V peak to peak.

The Megger digital ground tester is powered by eight AA batteries which are widely available and also give excellent testing time - the status of these batteries is given by a bar graph on the LCD display allowing you to decide when to change the batteries, before they expire.








The Megger ground testers are designed to meet stringent safety standards and are rated CAT IV 100 V.



**DET
3TD**

**DET
3TC**

Earth loop measurement			
Earth loop measurement with 2 opt. current clamps			
Selective grounding measurements ART		■	
Test frequency adjustable			
Measurement of earth voltage (0 to 100 V)	■	■	
2-wire earth measurement	■	■	
3-wire earth measurement	■	■	
4-wire earth measurement (spec. earth resistivity)			
Battery operation	■	■	
Connection for charger			
Accumulator operation			
Illuminated display			
Measured value memory			
Measured value memory with interface			
Measurement leakage current (0.2 mA - 35 A)			
Measurement leakage current (0.5 mA - 19.9 A)		■	
Resistance measurement	0,1 to 2 kΩ	0,1 to 2 kΩ	
Software PowerDB Lite			
Software PowerDB full version			

	 DET 4TD2	 DET 4TR2	 DET 4TC2	 DET 4TCR2	 DET 14C	 DET 24C	 DET 2/3
					■	■	■
			■	■			■
			■	■			■
			■	■			■
	■	■	■	■			■
	■	■	■	■			■
	■	■	■	■			■
	■	■	■	■			■
	■		■		■	■	■
		■		■			■
		■		■			■
			■	■	■	■	■
					■	■	■
						■	■
					■	■	■
			■	■			■
	0,1 to 20 kΩ	0,1 to 20 kΩ	0,1 to 200 kΩ	0,1 to 200 kΩ	0,1 to 1500 Ω	0,1 to 1500 Ω	0,1 to 20 kΩ
	■	■	■	■		■	■
	□	□	□	□			

■ Included

□ Option

TDR500/3

**SINGLE CHANNEL TIME DOMAIN
REFLECTOMETER & CABLE LENGTH
METER**



**CATIV
150V**



TDR500/3P
Item no.
1002-227

- Minimum resolution of only 0.1 m for troubleshooting very close to the cable end
- Maximum measuring range up to 5 km
- Output resistances of 25, 50, 75 and 100 Ω and a velocity factor between 0.2 and 0.99
- Trace Hold function
- High-resolution display
- Very intuitive and easy operation through a control switch
- AUTO selection of gain and pulse width
- IP54 protection class for harsh environments

Included accessories: Carrying case, test probe test set

The TDR500/3 is a hand held, compact time domain reflectometer for locating faults on metallic cables. It has a minimum resolution of 0.1 m and a 5 km maximum range depending on velocity factor selected and cable type.

Four output impedances are available (25, 50, 75, and 100 Ω) and a velocity factor between 0.2 and 0.99 will meet any cable test requirements

The TDR has a simple selection option which together with a 4 way control switch offers an intuitive operation for the user.

An AUTO selection option ensures that the most effective parameters are selected depending on the range required, aiding rapid diagnosis of the TDR trace. A clear operator controlled cursor allows instant measurement of the distance to the fault.

A trace HOLD feature also allows the operator to hold a trace on the screen, something not seen on most other handheld TDRs. Extra high resolution together with whitelight backlight and grey scale tones give the graphical display a vibrancy, aiding the user in identifying key events on the trace.



TDR2010

DUAL CHANNEL TIME DOMAIN REFLECTOMETER & CABLE LENGTH METER



TDR2010
Item no.
1007-078

- 600 V CAT IV Input Protection filter built in
- Step and Pulse TDR selections
- Distance Dependant Gain
- Test straight from the box
- Trace Tagging
- 2ns pulse width
- Designed for use on all metallic paired cables

Included accessories: Carrying case, AC-DC charger

The Megger® TDR2010 and TDR2050 are state of the art, dual channel, high resolution, compact Time Domain Reflectometers with a color screen for locating faults on paired metallic cables.

All TDRs in this series have a minimum resolution of 0.1 m / 0.3 ft and a 20 km / 65 kft maximum range depending on the velocity factor selected and the cable type. Various output impedances are available (TDR2010: 25, 50, 75, 100, 125 ohm + AUTO. TDR2050: 25, 50, 75, 100, 140 ohm + AUTO) and an auto impedance matching feature. The velocity factor can be set between 0.2 and 0.99 to meet any cable test requirements.

The TDR2000 series have a large, high resolution, color, WVGA display with easy set up features. Directional control buttons, together with soft keys, provide intuitive and easy operation for the user.

TDR2050

DUAL CHANNEL TIME DOMAIN REFLECTOMETER & CABLE LENGTH METER



TDR2050
Item no.
1005-023

- Two measuring channels and measured value memory for 100 traces
- Graphical color display (800 x 400) for better comparison of the measured curves
- AUTO set up mode for instant, easy use
- Length measurement and fault localization on copper cables
- Ultra-fast pulses for searching at the very near end of the cable
- Measurement category up to CAT IV / 600 V
- Protection class IP54 for harsh environments
- Minimum resolution of 0.1 m with 20 km maximum range
- Output impedances from 25, 50, 75, 100, 125 up to 140 Ohm
- Velocity factor between 0.2 and 0.99
- CAT IV 600 V input protection
- Step and pulse TDR selection
- Trace tagging facility that allows a name to be saved with the trace pulse width of two nanoseconds for use on all twisted-pair metal cables

Included accessories: Carrying case, AC-DC charger

BITE5 & BITE5 Advanced BATTERY TESTER



BITE5
Item no. **BITE5**

- Supports battery discharge testing
- Measures impedance on cells up to 200 V
- Supports lead acid, NiCD and lithium-ion
- Measures DC voltages up to 1000 V
- Measures AC voltages up to 600 V
- Touch screen set-up and trending
- USB and micro SD card
- Measures AC and DC current

Included accessories: Duplex probes (with temperature probe), Voltage test leads, Charger, Neck strap, Zero bar, 16 GB microSD card, microSD card USB reader, USB cable, Stylus, Carry bag, Pouch bag

BITE5
Item no. **BITE5-ADV**

- Measures impedance on modules up to 500 V
- Measures inter-cell (strap) resistance
- Supports lead acid, NiCD and lithium-ion
- Supports battery discharge testing
- Monitoring battery recharge
- Test parallel strings without segmenting
- Touch screen set-up and trending
- RFID Tag Reader

Included accessories: Duplex probes (with temperature probe), Voltage test leads, Charger, Neck strap, Zero bar, 16 GB microSD card, microSD card USB reader, USB cable, Stylus, Carry bag, Pouch bag

The BITE5 is a battery tester that tests lead acid batteries, NiCD batteries as well as lithium-ion batteries. It will measure and record battery voltage, impedance, and temperature, and also supports discharge testing. The BITE5 will measure the voltage, current, impedance and temperature throughout the discharge cycle.

Battery impedance testing

The BITE5 will measure cell impedance, cell voltage, and temperature. The recorded data can be trended on the unit's touch screen. View the trended data of each test or trend the data of each cell. Set pass, warning, and fail limits for voltage and impedance. Record the ripple voltage, ripple current, and float current and transfer the recorded data via USB or via an SD card to the PowerDB software, then create custom reports and automated analysis.

Battery discharge testing

The BITE5 will record voltage, DC current, impedance, and temperature of each cell throughout the entire discharge test. Measure the average impedance at the end of the commissioning test and use this as a limit for future impedance tests. Trend the recorded data on the BITE5 touch screen and view the trended data of each test, or trend the discharge of each cell. Transfer the recorded data via USB or via an SD card to the PowerDB software to create custom reports.

Solar systems

Measure and record combiner DC voltages. Measure the input and output of inverters. Test the lithium-ion batteries.



IMT100

INDUSTRIAL MULTI TESTER
FOR PHOTOVOLTAIC SYSTEMS

DIGITAL
MULTIMETER

TEMPERATURE
MEASUREMENT

INSULATION
TESTING

LOW
RESISTANCE

AC MAINS AND MOTOR
PHASE ROTATION

CAPACITANCE &
INDUCTANCE

DATA
MANAGEMENT



- Full color toughened graphic display
- Battery charger + Li ION & AA battery options
- Tough shock absorbing rubber over molding IP54 operational housing
- Tough carry case
- Over 7 multifunctional test leads Includes PV connectors and Type T Thermocouple 600V
- Guided lead setup diagrams
- True continuity and bonding testing 1 m Ω 10 Ω (200 mA) includes patented 4 wire Kelvin leads
- Accurate 2 wire continuity testing, 0.01 Ω 1 M Ω (20 mA 200 mA)
- Insulation resistance & surface leakage current detection 100 Ω 200 G Ω (50 1000 V & Guard Terminal)
- Diode test 0.01 V - 3.00 V
- DC Voltage and polarity test 0 - 1000 V
- AC voltage, phase rotation and frequency 10 mV - 1000 V (15 400 Hz)
- Meets IEC62446 for PV testing and additional tests
- Meets UN Regulation 100r3e for Electric Vehicle testing
- Safety protection IEC61010 & EMC IEC61326, CAT III 600 V up to 3000 m
- Data Storage and Management, 256 tests results date & time stamped
- Calibration certificate included

Included accessories: Hook strap assembly, Multipurpose industrial carrycase, SP5 remote probe, Temperature probe, T type CAT III 600 V

IR lead set (comprising of):

3 x Grabber Clips (Red, Black and Blue) CAT III 1000 V, CAT IV 600 V

3 x 4 mm Test leads, 2 m, 1 end Right Angle, 1 end straight (red, black and blue) CAT III 1000 V, CAT IV 600 V

3 x Test probes (red, black and blue), long reach (100 mm), CAT III 1000 V, CAT IV 600 V

Kelvin clip lead set CAT III 600 V (comprising of):

2 x Kelvin Clip leads, 2 meters, 4 mm Right Angled Connectors (4), Single (2-core) cable.

Kelvin probe lead set CAT III 600 V (comprising of):

2 x Kelvin Probe leads, 2 meters, 4 mm Right Angled Connectors (4), Single (2-core) cable.

Replaceable Kelvin Probe Pins (Pack of 4),

PV Test Lead Set adaptors (comprising of):

MC4-type one red and one black connector adaptors

MC3-type black connector adaptors





APPLICATIONS

- Photovoltaic installations – domestic, industrial, utilities
- Electric vehicles – Battery EV, Plugin hybrid EV, light EV
- Industrial and domestic installations
- Rotating machinery
- General Testing and fault finding



EVCC300

ELECTRIC VEHICLE CHARGER CHECKER

Item no. 1013-576

- Checks mode 2 and single phase mode 3 (level 1 and two phase level 2) chargers
- Checks chargers with SAE J1772 Type 1 and Type 2 connectors
- Performs four EV charger safety checks
- Performs four EV charger operation checks
- Checks to see if nuisance tripping or RCD/GFCI is likely to occur
- Reads control pilot state response from EV Charger to IEC61852-1

Included accessories: Continuity/earth bond lead, Blow molded case, EVA-T1 Type 2 to Type 1 connector adaptor

The EVCC300 introduces a new and convenient way of checking Electric Vehicle charge points. A simple all-in-one concept provides an easy to use solution to check both the safety and operation of mode 2 and single phase mode 3 (level 1 and two phase level 2) EV chargers. The instrument is ideal for those wishing to perform a check on an EV charger following manufacture, installation or repair, or just part of a maintenance schedule / inspection.



DCM1500S

SOLAR CLAMP METER UP TO 2000 V DC

**BLUETOOTH
CONNECTION
TO THE
MEGGER
LINK™ APP**



Item no. **1013-357**

- 2000 V DC
- TRMS 1500 V AC
- 1500 A AC/DC
- Smart Hold
- Auto ranging
- MIN/MAX Hold
- Inrush Current
- Megger Link app compatible
- CAT IV 600V / CAT III 1000V
- Data logger
- PV test leads with MC4PV plugs

Included accessories: DCM 4mm Lead Set (Inc. Probes and Crocodile Clips), TP-90 Thermocouple Probe, PVHV1 Lead (4mm Plugs), PVHV2 Lead (MC4PV Plugs), Hard Carry Case

The DCM1500S solar clamp meter has been designed to be used on electrical systems and equipment, including solar/ photovoltaic installations where there is a need to measure current, volts, resistance, and frequency. It is therefore intended for use while installing, maintaining, fault-finding, or monitoring those systems. In addition to voltage and current measurements, the DCM1500S has the ability to measure resistance, diode, capacitance, temperature, and frequency.

It can measure up to 2000 V DC and 1500 V AC (using the PVHV Leads), as well as 1500 A AC or DC. It has a large, clear backlit display and an automatic flashlight in the jaw to make it easier to see in poorly lit areas. Also, using the free Megger Link App, the measurement value can be remotely monitored on a smart device using its built-in Bluetooth. This will give a live trend graph and offer the ability to sample and log the values for later analysis.

The instrument's smart data-hold function expands the standard hold function by giving the operator an audible warning if the 'held' reading increases by 50 counts or above. „Min/Max“ hold gives you the ability to measure the maximum and minimum values over a period of time, with each value selectable in turn. Other features of the DCM1500S include a high frequency rejection filter, inrush current measurement, internal data logging, a non-contact volt seek mode, and manual DC Amp zeroing.



PVM210

IRRADIANCE METER

The Megger PVM210 provides the solar / photovoltaic engineer a compact, pocket size instrument that is easy to use. Single handed operation is possible because the solar detector and meter are being housed in one neat unit. This feature is ideal when using the instrument on a sloping roof or at the top of a ladder.

With the easy-to-read display and measurement hold feature the meter gives fast, accurate readings of solar power for initially choosing optimum position for the photovoltaic panel. In addition the meter can provide the vital measurement for the calculation of short circuit current in conjunction with a suitable ammeter to verify the stated short circuit current provided by the manufacturer of the panel.

In addition to W/m^2 measurements, a selectable BTU (British Thermal Unit) measurement range is also featured.



Item no. **1002-548**

- Optimal incident angle and positioning of solar panels
- Measurement of solar power for panel short circuit calculation
- 3¾ digit LCD display with 1999 W/m^2 range
- Single handed use
- Mini pocket size
- Standard camera mount fixing for accurate placement

Included accessories: Batteries, Pouch, Calibration certificate

MTR105

TESTER FOR ROTATING MACHINES



**5
TESTERS
IN ONE!**

Item no. **1010-361**

- Full color graphic display
- 3-phase insulation resistance
- Temperature correction for insulation resistance
- Guard Terminal
- Continuity testing and diode testing
- Direction of motor rotation
- Capacitance and inductance
- CAT III 600 V up to 3000 m
- Protection class IP54
- DLRO Four-wire measurement

Included accessories: Hook strap assembly, soft bag, temperature probe type T CAT III 600 V; MTR105 calibration certi fi cate; USB memory stick; IR test lead set: 3 x clips (red, black and blue) CAT III 1000 V CAT IV 600 V, plus, 3 x 4 mm test leads 2 m, 1 end right angle 1 end straight (red, black and blue) CAT III 1000 V CAT IV 600 V, plus, 3 x test probes (red, black and blue), long reach (100 mm) CAT III 1000 V CAT IV 600 V; Kelvin test lead set with clamp CAT III 600 V: 2 x Kelvin terminal leads, 2 m 4 mm right-angle connectors (4), single (2-core) cable

PAT320

PORTABLE APPLIANCE TESTER



The PAT320 is a portable bench-top appliance tester for testing the safety of electrical equipment by performing a ground bond test, an insulation test, specific ground leakage tests and operational VA tests to international standards. It is a fully featured tester designed for customers who do not need the complexity of a fully configurable database of clients and results within the tester but require a complete range of functions to allow automatic or manual testing of the widest range of electrical equipment.

PAT320
Item no.
1001-366

- Simple manual or automatic testing
- 120 V 60 Hz operation
- User-selectable PASS/FAIL limits
- Fast test times selectable from 1 s
- Ground bond testing at 25 A, 10 A and 200 mA
- Differential, touch and substitute ground leakage testing
- Tests power cords
- Full color QVGA display

Included accessories: Continuity/earth bond lead, Storage/carry case w/ lead and document pouch, Extension lead adaptor (ELA) 120V US

PAT450

PORTABLE APPLIANCE TESTER



Operators of electric tools and other electrical equipment must be protected from potentially dangerous flaws in workmanship or wear and tear. The PAT450 is designed to test portable electrical equipment for safe operation.

PAT450
Item no.
1000-956

- Large, illuminated, colored display with pass/fail indication
- Customer database - up to 100 customers with 2000 locations possible for each customer
- Test item database - up to 10,000 tests results
- Ex works with approx. 30 preset test groups
- Adjustable limit values and test times
- Login to the test device with a user name and personal PIN, for legally compliant documentation, a distinction is made here between "Supervisor" (all rights) or "User" (restricted rights)
- Complete database backup and, if necessary, restoration via USB memory stick
- 200mA +10A +25A protective conductor current and insulation test with 1500V and 3000V

Included accessories: Printed short manual, Detailed operating manual on CD-ROM, calibration certificate, carrying case, measuring cable with test probe and clamp, adapter for extension cable, calibration certificate, measuring cable with test probe and clamp. (Schuko - cold devices), adapter IEC C6-C13 (cloverleaf), measuring cable for high-voltage tests

DPM1000

POWER CLAMP WITH MEGGER
LINK APP



BLUETOOTH-
CONNECTION
TO THE
MEGGER
LINK™ APP

POWER METER
HARMONICS
METER
DATA LOGGER

The Megger DPM1000 power clamp meter combines the functionality of a power meter, harmonics meter, and data logger in one easy-to-use package that meets the requirements of BSEN 61010-1 CAT IV 600 V for supply side applications. It has a large, backlit LCD screen that clearly displays all measurements that can be selected at the touch of a button or when rotating the selection dial. It also features auto-ranging and has three-phase rotation indication and automatically switches off to save battery consumption.

Item no. **1013-356**

- AC/DC Voltage to 1000 V
- AC/DC Current to 1000 A
- True RMS
- Resistance 100 k Ω
- LCD Display
- Phase rotation indication
- Inrush current
- Auto backlight display
- Frequency measurement
- Capacitance measurement
- Power Factor Measurement
- Watt measurement to 1 MW
- Harmonic measurement
- Harmonic distortion
- Diode test
- Non-contact volt alert
- Continuity Beeper
- Data Hold/Min-Max/Peak Hold
- Bright LED flashlight
- Temperature to 1000° C
- Hard carry case
- CAT IV 600V Rating
- Bluetooth/Megger Link™ APP
- Supplied with carry case

Included accessories: DCM 4mm Spare Lead Set, TP-90 Thermocouple Probe, Hard Carry Case

The DPM1000 can measure DC, AC, pulsed, and mixed currents up to 1000 A simply by clamping the jaws around the appropriate conductor, while voltages up to 1000 V AC or DC may be measured by the supplied test leads. Where power measurements are to be made, both techniques above are performed simultaneously. All power related parameters can be measured including energy consumption, frequency, total harmonic distortion, distortion factor, and capacitance.

The instrument can make temperature measurements up to 1000 °C using the thermocouple provided, has an internal flashlight that can be used during the operation of the clamp, and has automatic non-contact voltage detection for identification of live circuits.

The DCM1000 is ideally suited to measuring mains power quality and applications in the development, installation, maintenance, and repair of equipment and devices used in power electronics and power engineering.

TPT420

2-POLE TESTER



The Megger TPT420 voltage tester is designed to provide electricians and electrical engineers with an easy-to-use voltage indicating instrument. The meter will continue to warn the operator of dangerous test voltages even when the batteries are exhausted.

With both LCD and LED displays, the TPT420 provides both AC and DC voltage measurement from 12 to 1000 V AC and up to 1500 V DC. In addition, a continuity function within the range 0 to 500 k Ω , is included and for added safety, continuity, and voltage measurements are also accompanied by an acoustic sounder.

Item no. **1013-189**

- CAT IV / 1000 V
- IP64 Rated
- 12...1000 V AC
- 12...1500 V DC
- LED and LCD Display
- Continuity test function with visual and acoustic indication
- Voltage indication with no batteries
- Single pole voltage test
- Phase rotation indication
- Integrated flashlight

Included accessories: Pouch, GS88 shrouds, Batteries 2 x AAA

MPU690

PROVING UNIT FOR 2-POLE TESTERS COMPATIBLE WITH ALL COMMON VOLTAGE TESTERS

The MPU690 proving unit provides a portable battery operated voltage source that can verify the correct functioning of two-pole voltage detectors. The device safely generates a range of voltages from 50 to 690 V in five steps. At switch on, the unit initially generates 690 V then, after a short period, slowly ramps down through each voltage step until the device switches off. The individual voltage steps are indicated by an LED.



Item no. **1001-561**

- Tests 2-pole testers and voltage indicators
- Step LED indicate test voltages 50V, 100V, 230V, 400V, 690V
- Simulates AC voltage with 50 Hz
- The compact housing contains a magnetic holder
- Automatic switch-on and switch-off for energy-saving operation, Battery level warning



MET 1000

ELECTRICAL TESTER



IEC 61010-1
CAT IV 600 V
CAT III 1000 V

ALL
IN
ONE

The MET1000 All-in-one true RMS electrical tester is a multifunctional voltage and current tester that gives electricians and electrical engineers a versatile and robust handheld meter with detachable test leads. Featuring both LED and LCD displays, it gives you a 200 A AC and 1000 V AC/DC tester designed for everyday use. CATIV 600 V/CATIII 1000 V rated, with an IP65 housing for added protection, it reduces the number of testers required in the professional's tool bag.

In addition to the unit's adaptable auto-ranging voltage and continuity tests, the Megger MET1000 has a built-in current clamp for AC current measurement to 200 A. With true RMS AC measurements, a phase rotation test, and single pole voltage test built in, the MET1000 is a truly multi-purpose electrical test instrument, ideal for use in commercial, industrial, and domestic environments. It even comes with GS38 shrouds, provided as standard, to ensure compliance with the latest standards.

The instrument includes a bright LED flashlight to aid in safety when working in poorly lit conditions, and has a protective finger guard incorporated into its protective casing. This combined with its ergonomic design, carrying holster, and its easy-to-use probe mounting on the rear of the tester, all help to keep the user safe and the instrument protected.

Item no. **1013-099**

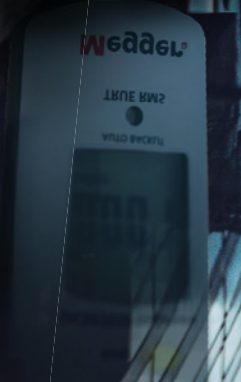
- LED & LCD Display with self-test
- Detachable Test Probes
- AC/DC Voltage to 1000 V
- 200 A AC measurement
- True RMS on ACV/ACA
- IP65
- Phase Rotation
- Single pole test
- Data Hold
- Measures voltage without batteries
- Complies with IEC/EN 61243-3:2014
- IP65

Included accessories: Red and black probe lead set, Carry holster with belt loop



DCM305E

LEAKAGE CURRENT CLAMP



- Measuring ranges: 6 mA, 60 mA, 600 mA, 6 A, 60 A, 100A
- Automatic or manual measuring range
- 0.001 mA Resolution
- Up to 100 A range for standard AC current measurements
- TRMS value reading
- Low pass filter to aid stability of readings
- Auto Hold, Data Hold & Peak Hold
- 40 mm clamping jaw

Included accessories: Carry pouch, lead set and manual

Specially designed to check earth leakage currents, the DCM305E is an efficient and highly versatile instrument. It has six ranges, 6 mA, 60 mA, 600 mA, 6 A, 60 A, and 100 A, with a minimum resolution of 0.001 mA on the 6 mA range. Its upper range also enables TRMS AC current measurements up to 100 A.

The 40 mm jaw has been designed to allow measurements on both insulated and non-insulated conductors and this clamp meter vastly improves measurements on circuits with harmonics/ electric noise on the cables using a low pass filter of 50/60 Hz.

Safety is of the utmost importance and with that in mind, the DCM305E exceeds the latest safety design standards IEC1010-2-32 and EMC requirements and also includes a tactile hand barrier/hand guard in the instrument case design to help protect you when working.

A compare function is also featured which has 3 pre-set leakage limits (0.25, 0.50, 3.5 mA) which, when selected, offers a visual indication and audible warning when the pre-set limit is exceeded. Other key functions include the "Data Hold" feature, which helps you record measurements in areas that are difficult to access or are in poor lighting, and the "automatic power off" feature, which will switch the clamp off if no readings have been made during a 20 minute period, extending the battery life.

TTRU1

HANDHELD TRANSFORMER
TURNS RATIONETER



TTRU1 BASIC
Item no.
TTRU1-BASIC

TTRU1 ADVANCED
Item no.
TTRU1-ADV

- Single phase source and measurement for single phase, three phase, and instrument transformer testing:
 - Turns ratio, excitation current, and polarity
 - Up to 62.5 V induced, $\pm 0.05\%$ accuracy
- Go/No Go short circuit, open circuit, and inductance winding tests
- Accuracy guaranteed from $-20\text{ }^{\circ}\text{C}$ to $50\text{ }^{\circ}\text{C}$
- Easily manage data with custom transformer entry, auto saving, USB export, and PowerDB import
- AA battery operated

Included accessories: Soft carry case, USB C to A cable, USB C to C cable, 2 m (6 ft) H and X leads, USB drive

Power through transformer electromechanical tests with the new TTRU1, the latest handheld transformer turns ratiometer from Megger. Perform routine polarity validation and turns ratio tests on power, distribution, and instrument transformers guided by color-coded leads, clamps, and customizable on-screen vectors that match the transformer nameplate under test. In addition to turns ratio tests, the TTRU1 adds go/no-go short circuit, open circuit, and inductance test capabilities. The easy to follow setup ensures the right result the first time - just click start and perform over 1000 turns ratio tests on a single NiMH AA battery charge! When it's time to recharge the batteries, connect to any standard USB wall charger or connect to your PC.

ADVANCED FEATURES

- PowerDB Import
- Customizable transformer vector list and voltages
- Guided three phase transformer tests
- Go/No Go short circuit impedance, open circuit, impedance



AVO215

CAT III TRMS MULTIMETER



Item no. **1015-233**

- 4000 count display
- AC / DC Voltage to 600 V
- AC / DC Current to 10 A
- True RMS
- Resistance, capacitance, frequency ranges
- Duty cycle
- Auto ranging
- Auto power off
- Data hold
- Max/Min
- Built in flashlight
- Rear tilt stand
- CAT III 600 V Rating

Included accessories: Test leads, Protective carry pouch



The AVO215 true RMS multimeter is a rugged compact instrument for demanding environments. It measures true RMS voltage up to 600 V and current to 10 A with 4000 count resolution. As well as resistance, continuity, frequency, and capacitance for quick verifications, it meets CAT III 600 V AC/DC safety and contains a built-in flashlight, making it ideal for wide range of applications.

The AVO215 comes with a range of useful features, such as the continuity function, which provides audio and visual results through the use of a buzzer, and the diode function, which allows forward reverse bias testing of diode and semiconductor junctions. Additionally, the unit has an auto range or manual range selection, enabling you to do the job with precision and speed, and its MIN/MAX and hold functions allow you to read the results easily in daily use.

AVO850

TRMS MULTIMETER



The AVO850 is a professional True-RMS digital multimeter with TFT color LCD screen 50 000 count display. Includes handy bar graph, capture and Bluetooth features. Designed for precision and convenience, this is a high-accuracy multimeter that runs on rechargeable batteries.

The meter meets CAT III and CAT IV IEC 61010-1 standards. The IEC 61010-1 safety standard defines four measurement categories (CAT I to IV) based on the magnitude of danger from transient impulses.

The AVO850 is a professional True RMS Industrial Digital Multimeter and TFT color LCD, providing fast AD converting sampling time, high accuracy, built-in data logging and Trend Capture features. Live data can be viewed using the Megger Link app.

Item no. **1015-515**

- Safety rated CAT III 1000 V, CAT IV 600 V
- True-RMS AC current and voltage
- High accuracy $\pm(0.05\%)$
- Measure frequency up to 10 MHz
- Resistance, continuity and diode measurements
- 10 mF capacitance range
- High resolution 50 000 count
- Current measurement to 10 A
- Analog bar graph
- Li-ion rechargeable battery; AC Adapter and charger
- Bluetooth interface and Megger app

Included accessories: 1 m 4 mm non-fused, right angle connector test leads* (x2)
4 mm exposed metal Probes* (x2), Exposed tip probes for CAT II probing (x2), Red and black crocodile clips*, K-type multimeter adapter, K-type thermocouple lead, Soft case, 4 mm cap plugs (x2), Rechargeable battery and universal mains charger
*Ratings: Double insulated, CAT III 1000 V, CAT IV 600 V, 10 A max

The AVO850 True RMS multimeter designed for electronic, electricians, technicians, engineers, and service personnel. Bluetooth connectivity and app support for Android or iOS devices allow real-time result sharing. Use the smart app to remote track readings from a safe distance or store for future reference.

CAT III 1000 V / CAT IV 600 V safety rated with 50,000-count on bright TFT color LCD. The AVO850 high precision and advance features make it ideal for industrial and lab use. Comes equipped with 4-20 mA process loop measurement with % reading, AC+DC and LoZ.

The continuity function features audible and visual results. Diode function allows forward reverse bias testing of diode and semiconductor junctions. Or the temperature measurements allowing you to find electrical faults from one tool.

It can store and recall data. It features a waterproof, rugged design for heavy duty use. Proper use and care of this meter will provide many years of reliable service.

TC3231

THERMAL CAMERA FOR FAST LOCALIZATION OF HOTSPOTS



Item no. **1012-514**

- Full thermal image for IR temperature measurement
- Measurement range -4 to 572 F
- Adjustable emissivity
- Micro SD memory for storing up to 6000 images
- Max/Min Measurements on screen
- Hot & Cold Spot tracking on screen
- Full image blending and selectable measurement distance of 0.5, 1, 2 or 3m for greater accuracy

Included accessories: USB mains charger, USB lead, Micro SD card, SD card adapter

The Megger TC3231 offers a professional infrared 32 x 31 pixels image thermometer with a 2.2 inch (55.88 mm) color TFT LCD display. Quick, accurate readings are possible; covering a wide range of surface temperature measurements.

The product combines the convenience of an infrared thermometer with the visual advantage of a thermal imager providing a troubleshooting camera with infrared heat map.

MCT105

CABLE LOCATOR



Item no. **1013-836**

- Trace cables and conductors in walls
- Works on both live and dead cables or conductors
- Locate conductor breaks and short circuits
- Identify fuses and circuit breakers
- Trace conductors buried in the ground
- Trace metal water and heating pipes
- Visual and audible signal strength indication
- Non-contact voltage detector (receiver)
- Automatic or manual sensitivity adjustment
- Built-in flashlight (receiver)

The kit for the Megger MCT105 cable locator includes a separate transmitter and receiver. The instrument is designed to help detect and trace cables or metallic conductors in walls or buried underground and can locate and identify fuses or breakers on electrical circuits. It can also find breaks or short circuits in cables and electrical underfloor heating systems and can be used for tracing metal water and heating pipes.

The transmitter operates on 5 voltage ranges: 12 V, 50 V, 120 V, 230 V, and 400 V, as well as generating a signal on dead or isolated cables and conductors. The receiver offers either automatic or manual adjustment of the signal sensitivity for increased accuracy and can detect buried cables up to a depth of 2.5 M. Both units include an auto power off feature and low battery indicators.

MFL205

FUSE LOCATOR



Item no. **1013-835**

- Identify circuit breakers or fuses
- Simple to use
- Auto-Sensitivity adjustment
- Audible and visual indication
- 110/230 V operation
- Industry standard 4 mm connectors
- Red and Black crocodile clips supplied
- Carry case included

The Megger MFL205 is a simple-to-use instrument, designed to help identify an individual fuse or circuit breaker on a fuse board or within a consumer unit.

Using industry standard 4mm connectors, the MFL205 transmitter can be directly connected to a circuit using the supplied crocodile clips or - with relevant adaptors - be connected to a mains socket outlet or a light socket of the circuit that the fuse or breaker to be identified is protecting.

VF5

AC VOLTAGE DETECTOR



Item no. **1013-098**

- AC non-contact voltage detector
- 12V – 1000V voltage range
- Visual, audible and vibration warning of low and medium voltages
- Durable rubber over-molded body
- IP67
- Screw-on battery cover
- Built-in bright-white LED torch
- CAT IV 1000V

Included accessories: Batteries 2 x AAA

The Megger VF5 Voltage Detector is intended to be used to check for the presence of AC voltage, indicated by a bright red LED situated within the white nylon tip, an audible sounder, plus vibration alert.

The detector has both low voltage (12 – 1000 V) and medium voltage (100 – 1000 V) ranges. The VF5 has the added advantage of a bright-white LED flashlight for use in poor light.

MLM50

LASER DISTANCE METER



Item no. **1013-551**

- 50 m Range
- Accuracy 1.5 mm (up to 10 m range)
- Single measurement mode
- Continuous measurement mode
- Automatic Max/Min
- Area Calculation
- Volume Calculation
- Meters, Feet & Inch Ranges
- 20 measurement memory
- Front or rear measurement reference
- Built-in spirit level
- IP54

Included accessories: Carry pouch with belt loop

The Megger MLM50 Laser Distance Meter is a compact, simple to use, laser distance measuring device. With a measurement range of up to 50 m, the MLM50 offers the user either single or continuous measurement modes and the ability to track maximum and minimum measurements quickly and easily.

In addition, the unit can automatically calculate area or volume and has the added bonus of recording the last 20 readings into its internal memory for later recall. Memorized values are retained, even if the batteries are removed or replaced.

MSL10

STUD LOCATOR



Item no. **1013-547**

- Locate wooden joists or studs
- Locate metal joists or studs
- Locate live AC cables
- Simple to use
- Adjustable depth range
- Audible and visual indication
- Carry case included

The Megger MSL10 is a simple to use instrument, designed to help locate the edges of wooden studs, metal joists or live AC cables through drywall or other common building materials. With clear LED and audible indication, the center of studs or joists can be located by scanning from either side to locate each edge.


MEGGER LINK APP


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