

LOW VOLTAGE CATALOGUE
2020

Megger[®]

**THE WORLD OF
TEST ENGINEERING**



TABLE OF CONTENT

SINCE 1889

Megger is one of the pioneers of the electrical industry. The foundation of Megger goes back to 1889, when a certain Sidney Evershed (1858-1939) from London invented the first megohmmeter. At that time, the large-scale electrification of cities was already in full swing, but until then there was no way to reliably check the quality of the insulation. But only this provided the basic prerequisite for the safe laying of electrical cables. In 1895, Evershed joined forces with his colleague Ernest Vignoles. Together they founded "Evershed & Vignoles Limited". Fourteen years later, in 1903, "Megger" was registered as a trademark at the Patent Office in London and protected worldwide. By the way: Megger is derived directly from the term "megohmmeter" and, etymologically speaking, is actually a full-fledged synonym for insulation resistance measurement. In short: Megger is the original.

In 1908, the "Ductor" brand was also protected worldwide by Evershed and Vignoles. This brand name, which is still very well known in the USA and England, is also a short form and stands for "Conductor Tester". This was a device with which the conductivity of electrical conductors could now be tested. So the first low ohm measuring instrument in the world also comes from Megger. The "DUCTOR" is still used today in our type designation DLRO - "Ductor Low Resistance Ohmmeter". Another original.

And also our type designation "AVO" for our digital multimeters goes back to a special history: "AVOMETER" was the name of the very first multimeter in the world. It was also the first portable, multifunctional measuring device in the history of the electrical industry. The idea came from the then head of the "General Post Office Telephone" in London: Donald Macaide. He wanted to combine an ammeter, a voltmeter and an ohmmeter in one housing. For a good reason: before 1923, three huge devices were needed, as well as shunts, series resistors and batteries. In order to measure voltages, currents and resistances. Today with the help of digital electronics, and revolutionary electronic components, Megger is continuing its mission of making your life easier by developing more powerful and safer testers that are light to carry, comfortable to hold and easier for you to use, helping you to keep the Power on.

| | |
|---|----------------|
| Introduction / Contents | 2 - 3 |
| Installation testers | 4 - 7 |
| Appliance testers | 8 - 9 |
| Insulation resistance measuring instruments | 10 - 11 |
| Earth measurement | 12 - 13 |
| Tester for rotating machines | 14 |
| Digital multimeters | 15 |
| Current clamps | 16 - 17 |
| Low resistance ohmmeters | 18 |
| TDR - Cable fault locators | 19 |
| Voltage testers | 20 |
| Thermal imaging camera | 21 |

INSTALLATION TESTER

MFT1815 / MFT1825 / MFT1835 / MFT1845+



MFT1815

Item no. 1002-403

MFT1825

Item no. 1002-408

MFT1835

Item no. 1002-415

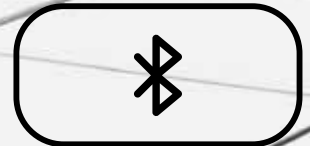
MFT1845+

Item no. 1012-597

The MFT1800 series complies with all standards for testing low-voltage electrical installations IEC 61010-1 offering you all the test features needed for the mandatory testing of electrical systems. The MFT1800 series provide safety input protection across all terminals and warns the user of any dangerous voltages, on both single and three phase circuits. The MFT1800 series provide a light, compact easy to use tester and the MFT1845+ includes the very latest, patented, True Loop™ technology for unrivaled earth loop measurements - even in high noise environments. This makes the MFT1845+ future-proof and meet all the requirements of EN61010 CATIV. All models feature 2 & 3 wire loop resistance testing without RCD tripping for fast, repeatable results, comprehensive testing of RCD's including type B, as well as the latest current clamp measuring methods for stakeless earth testing. Further we provide an internal memory with Bluetooth communication (model dependent) for easy creation of test reports.

Included accessories: Printed quick start guide, complete operating manual on CD, calibration certificate, switch probe SP5, shoulder strap - embroidered with Megger logo, lead set with probes and crocodile clips, European test lead SIA45 (not AU), AC charger, MFT carrying case

MFT1815



MFT1825



MFT1835



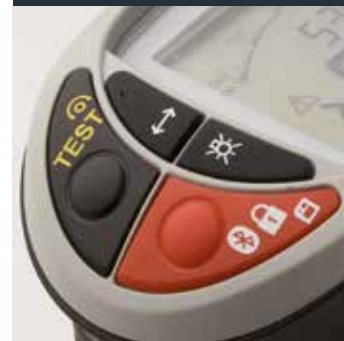
- Voltage TRMS up to 600V
- Rotary field measurement
- Frequency 15Hz to 400Hz
- Continuity 15/200mA with limit alarm
- Insulation 100V, 250V, 500V, 1000V
- Loop Impedance with True Loop™
- 3-Wire No-Trip test
- 2HI - 2-wire high current
- 2-Wire No Trip (No neutral required)
- True Loop™ with visible measurement analysis (MFT1845+)
- Type A, AC (+ S & B - MFT1825/1845+)
- 10/30/100/300/500mA/ 1A/ Fi/RCD Test
- Fi/RCD Manual/Automatic Test
- Fi/RCD Ramp Test
- Programmable Fi/RCD test current
- 6mA DC RCD test for EV charging stations (1845+ only)
- CAT IV / IP 54 / ca.1200g / with batteries
- 2 & 3 pole earth testing (MFT1825/1845+)
- No-Stake earth testing using optional clamps (MFT1835/1845+)
- ART Earth testing without disconnection (MFT1845+)
- Optional MCC Earth Leakage clamp (MFT1845+)
- Rechargeable batteries (NiMH) with charger (MFT1835/1845+)
- Measured value memory 1000 results (MFT1835 & 1845+)
- Bluetooth interface (MFT1845+)



The analogue arc simulates the behaviour of a mechanical measuring needle display



A sturdy hard shell case offers your device space and protection (the MFT1845+ comes in a bag)



Large buttons left and right for two-handed operation



Robust rotary switches with safe and easy colour coding



MFT1815



MFT1825



MFT1835



MFT1845+

| Insulation measurement | | | | |
|---|---|---|---|---|
| 100 V | | | ■ | ■ |
| 250 V | ■ | ■ | ■ | ■ |
| 500 V | ■ | ■ | ■ | ■ |
| 1000 V | ■ | ■ | ■ | ■ |
| Test voltage display | ■ | ■ | ■ | ■ |
| Acoustic signal adjustable | | ■ | ■ | ■ |
| Continuity and resistance measurement | | | | |
| 200 mA Test current | ■ | ■ | ■ | ■ |
| 15 mA Test | | ■ | ■ | ■ |
| Measurement line compensation | ■ | ■ | ■ | ■ |
| Acoustic signal adjustable | ■ | ■ | ■ | ■ |
| continuity test with automatic polarity reversal | ■ | ■ | ■ | ■ |
| Loop impedance measurement | | | | |
| Fast loop measurement | | | ■ | ■ |
| 3-wire test without FI/RCD tripping (L-N-PE) | ■ | ■ | ■ | ■ |
| 2-wire test without FI/RCD tripping (L-PE) | ■ | ■ | ■ | ■ |
| 2-wire test with high current (L-L and L-N) | ■ | ■ | ■ | ■ |
| 2-wire test outer conductor-outer conductor (L-L) | ■ | ■ | ■ | ■ |
| Display Short circuit current up to 20 kA | ■ | ■ | ■ | ■ |
| TrueLoop™ technology for noise reduction | | | | ■ |
| FI/RCD audit | | | | |
| 1/2 and 1 x IΔN FI/RCD examination | ■ | ■ | ■ | ■ |
| 2 x IΔN FI/RCD audit | | ■ | ■ | ■ |
| 5 x IΔN FI/RCD audit | ■ | ■ | ■ | ■ |
| Auto FI/RCD check | ■ | ■ | ■ | ■ |
| Increasing current (ramp test) | ■ | ■ | ■ | ■ |
| Type AC (standard) FI/RCDs | ■ | ■ | ■ | ■ |
| Type A (DC pulse) FI/RCDs | ■ | ■ | ■ | ■ |
| Type S (selective) FI/RCDs | ■ | ■ | ■ | ■ |
| Type B/B+ (sensitive to universal current) FI/RCD | | ■ | ■ | ■ |
| EV RCD 6 mA | | | | ■ |
| Programmable FI/RCD test current | ■ | ■ | ■ | ■ |
| Display of the touch voltage | ■ | ■ | ■ | ■ |
| Contact voltage limit value sett. 25/50 V | ■ | ■ | ■ | ■ |
| FI/RCD tests 2-pole without N or PE | ■ | ■ | ■ | ■ |
| Testing with reversed polarity possible | ■ | ■ | ■ | ■ |
| 10 mA, 30 mA, 100 mA, 300 mA, 500 mA FI/RCD | ■ | ■ | ■ | ■ |
| 1000 mA FI/RCD | | ■ | ■ | ■ |
| 3-phase RCD (no Earth) | | ■ | ■ | ■ |
| Earth measurements | | | | |
| Earth measurements 2-pole or 3-pole | | ■ | ■ | ■ |
| Earth measurements with 1 current clamp (ART) | | | ■ | ■ |
| Earthing measurements with 2 current clamp. (ground loop) | | | ■ | ■ |
| Measuring voltage limit value sett. 25/50 V | | ■ | ■ | ■ |
| Earth fault voltage test | | ■ | ■ | ■ |
| Other functions | | | | |
| T RMS | | | ■ | ■ |
| Voltage measurement (L-N, L-PE, N-PE) | ■ | ■ | ■ | ■ |
| Frequency measurement | ■ | ■ | ■ | ■ |
| Current measurement, with MCC1010 | | | ■ | ■ |
| Rotary field display | ■ | ■ | ■ | ■ |
| Temperature measurement with external sensor, mV input | | ■ | ■ | ■ |
| Illuminated LC display | ■ | ■ | ■ | ■ |
| Automatic switch-off (Auto-Power-Off) | ■ | ■ | ■ | ■ |
| Calibration certificate included in delivery | ■ | ■ | ■ | ■ |
| Operation with batteries or rechargeable batteries (NiMH) | ■ | ■ | ■ | ■ |
| Batteries included | ■ | ■ | | |
| Batteries and charger included | | | ■ | ■ |
| Internal measured value memory, Bluetooth® download | | | ■ | ■ |
| Optional software (dokuSTORE 2.0 and 4.0, PROTOCOL manager, ELEKTROmanager) | | | ■ | ■ |
| Safety rating CAT IV 300 V | ■ | ■ | ■ | ■ |
| Safety rating CAT III 600 V | | | | ■ |
| 3-year warranty (on registration) | ■ | ■ | ■ | ■ |

Accessories

All devices:



Extended test lead XTL30

30 m
Item no. 2007-997



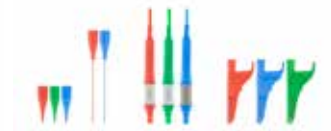
Three-phase current adapter 16A

DE-CEE16-S (plug)
Item no. DE-060



Accessory bag

Item no. 1007-463



Test lead set CAT IV 600 V

(standard 3 wire lead set with un-fused probes and clips),
Item no. 1001-99

Extended test lead XTL50

50 m
Item no. 2007-998

Three-phase current adapter 32 A

DE-CEE32-S (plug)
Item no. DE-061



Test & carry pouch

(Dimensions: approx. 240 x 160 x 70mm),
Item number 1006-408

Test lead set CAT IV 600 V

(with fuses 10A F, 600 V, especially for energy suppliers & public utilities,
Item no. 1001-975

only MFT1835 & MFT1845+



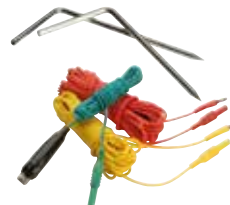
MCC1010 (ICLAMP)

CAT IV 600 V
Item no. 1010-516



MVC1010 (VCLAMP)

CAT IV 600 V
Item no. 1010-518



Earth Test Spike Kit

3 pcs. (4 m, 10 m, 15 m),
with two earth spikes,
Item no. 1001-810



50m Earth Test Cables, Spikes & Clamps Kit

Earth measuring cables (2 x 50M & 2 x 30M) ground spikes and clamps,
Item number 1010-179

NEW! (only MFT1845+)



EV adapter

Test adapter for charging stations,
Item no. EVCA210



PAT400-Series



PAT410

Item no. 1000-747

PAT450

+/- 200 mA, 10A / 25A, ISO 1500/300

Item no. 1000-750

The PAT400 range is suitable for performing portable appliance testing in locations where high volume testing requires that accurate records need to be maintained and supported by on-board storage and download to management software.

Our devices offer time saving features: Thanks to the internal USB interfaces, a printer and scanner can be connected to allow for fast asset recall and testing. Furthermore the PAT has a quick start function. A battery allows to change the measurement location and continue testing when the power supply is reconnected - without rebooting the tester.

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 (Schuko - cold devices), adapter IEC C6-C13 (cloverleaf), measuring cable for high-voltage tests (only PAT450)

- Large, illuminated, coloured 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
- Bidirectional database exchange with PC software MEGGER dokuStore 4.0
- 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
- PAT420: 200mA +10A +25A Protective conductor current
- PAT 450: 200mA +10A +25A protective conductor current and insulation test with 1500V and 3000V
- Barcode scanner/ RFID reader and printer can be connected to the PAT via USB
- Five soft keys for quick access to frequently used functions

HANDY INSTRUMENT TESTER

PAT100-Series



PAT120

Item no. 1003-070

PAT150

Item no. 1003-071

- Simple tick or cross, pass or fail indication plus measurement
- Tough, rubber armoured with built-in front cover, hardened, scratch-proof display window
- Includes 250 V insulation and leakage testing for safe IT testing and surge protected devices
- Testing portable and fixed electrical equipment
- 10 mA and 30 mA portable RCD lead testing (PAT150)
- Adjustable PASS test limits (PAT150)
- Substitute and mains powered leakage testing (PAT150)
- Battery powered with rechargeable options

Included accessories PAT120: Test leads with test probe and clamp, adapter for extension cable, hard-shell case

Included accessories PAT150: Test leads with test probe and clamp, adapter for extension cable, mains connection lead, hard carry case



MIT-SERIES INSULATION RESISTANCE METERS



MIT410/2

Item no.

1004-737

- Insulation measurement up to 1 kV / 200 GΩ
- Stabilized insulation test voltage
- Faster single range continuity check 0.01 Ω to 1 MΩ
- Test voltage continuously adjustable from 10 V to 1,000 V
- 600 V TRMS AC and DC voltage measurement
- Optional rechargeable batteries with mains or 12V charging option
- Test category CAT IV 600 V
- Protection class IP54
- Ideal for energy suppliers

Included accessories: Red/black silicone test leads with probes and clamps, SP5 remote probe, information CD, 6 x AA batteries, hard case



MIT515

ARTIKEL-NR.:

1001-937

MIT525

Item no.

1001-941

- Insulation measurement up to 5 kV DC
- Measuring range to 15 TΩ (MIT515 and 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, product information CD, lead set 3 m, medium sized insulated test clamps



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)

INSULATION RESISTANCE MEASUREMENT AND DIAGNOSIS

Regular insulation resistance testing is one of the most cost effective, non-destructive methods of identifying ageing 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.

| | MIT200 | MIT210 | MIT220 | MIT230 | MIT300 | MIT310 | MIT310A | MIT320 | MIT330 | 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 | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | |
| Power supply | | | | | | | | | | | | | | | | | | | ■ | ■ | ■ |
| Rechargeable batteries | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ | ▲ |
| Security | | | | | | | | | | | | | | | | | | | | | |
| CAT III / 600 V | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | |
| CAT IV / 600 V | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Calibration certificate included | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Software included | | | | | | | | | | | | | | ■ | | ■ | | | | | |
| Power DB Lite | | | | | | | | | | | | | | | | | | | ■ | ■ | ■ |
| Power DB | | | | | | | | | | | | | | | | | | | □ | □ | □ |
| Download manager | | | | | | | | | ■ | | | | ■ | ■ | | ■ | | | ■ | ■ | ■ |
| Guard Technology | | | | | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ |

GROUND CLAMPS



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

DET14C

Item no. 1000-761

DET24C

Item no. 1007-331

- 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.

EARTH MEASUREMENT DEVICE



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, hard carry case

DIGITAL GROUND IMPEDANCE TESTER












DET2/3

Item no.

1008-962

- High resolution of 1 mΩ, ideal for large grounding systems
- Versatile test methods according to Wenner- or Schlumberger
- High accuracy for grounding resistances 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
- Large colour display with numeric and graphic result display

Included accessories: Operating manual on USB stick, calibration certificate, charger, calibration checkbox 250Ω, lid pocket

| |  |  |  |  |  |  |  |  |  |
|---|--|--|--|---|--|--|--|--|--|
| | DET3TD | DET3TC | DET4TD2 | DET3TR2 | DET4TC2 | DET4TCR2 | DET14C | DET24C | DET2/3 |
| 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 resistance) | | | ■ | ■ | ■ | ■ | | | ■ |
| Battery operation | ■ | ■ | ■ | | ■ | | ■ | ■ | ■ |
| Connection for charger | | | | ■ | | ■ | | | ■ |
| Accumulator operation | | | | ■ | | ■ | | | ■ |
| Illuminated display | | | | | ■ | ■ | ■ | ■ | ■ |
| Measured value memory | | | | | | | ■ | ■ | ■ |
| Measured value memory with interface | | | | | | | | ■ | ■ |
| Measurement leakage current (0.5 mA - 35 A) | | | | | | | ■ | ■ | |
| Measurement leakage current (0.5 mA - 19.9 A) | | ■ | | | ■ | ■ | | | |
| Measurement leakage current (0,00 a 2,00 A) | | | | | | | | | ■ |
| Resistance measurement | 0,1 to 2 kΩ | 0,1 to 2 kΩ | 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 |
| Software PowerDB Lite | | | ■ | ■ | ■ | ■ | | ■ | ■ |
| Software PowerDB full version | | | □ | □ | □ | □ | | | |

TESTER FOR ROTATING MACHINES

MTR105

Item no.

1010-361



5 devices
in one

- Full color graphic display
- 3-phase insulation resistance
- Temperature correction for insulation resistance
- Protection terminal
- Continuity testing and diode testing
- Direction of motor rotation
- Capacitance and inductance
- CAT III 600 V up to 3,000 m
- Protection class IP54
- DLRO Four-wire measurement (Kelvin measurement in the low-resistance range), inductance and capacitance

Included accessories:

- Hook strap, soft bag, temperature probe type T, CAT III 600 V, MTR105 calibration certificate, USB memory stick
- IR test lead set (consisting of):
 - 3 x clips (red, black and blue), CAT III 1,000 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 1,000 V, CAT IV 600 V
 - 3 x test probes (red, black and blue), long (100 mm), CAT III 1,000 V, CAT IV 600 V
- Kelvin test lead set with clamp CAT III 600 V (consisting of):
 - 2 x Kelvin terminal leads, 2 m, 4 mm right-angle connectors (4), single (2-core) cable



TRMS-DIGITALMULTIMETER

AVO830

Item no.

1007-494

AVO835

Item no.

1008-221

- True RMS multimeter with a voltage measurement range* up to 1000 V AC, DC and AC+DC and a current measurement range from 0.1 mA to 10 A
- Temperature measurement type K sensor (AVO 835)
- CAT III 1000 V and CAT IV 600 V**
- Protection class IP54
- Phase rotation
- Detection of live circuits with high/low sensitivity
- 10 M Ω / 10 kM Ω Input impedance
- Minimum, maximum, average value / smoothing
**dependent on model

Included accessories: Red/black silicone test leads with probes, information CD, 2 pcs. AA alkaline batteries, thermocouple type K (AVO835)



AC, DC
and
AC+DC



LEAKAGE CURRENT CLAMP



DCM305E

Item no. 2009-574

- 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

INRUSH CURRENT CLAMP



DCM1500

Item no. 1005-572

- Current measurement up to 1,500 A AC/DC
- Voltage measurement 750 V AC and 1,000 V DC
- Measurement category CAT IV and True RMS
- Fast sampling rate of 10ms
- True RMS measurements for higher accuracy
- Large clamp opening for safe measurements on non-insulated conductors
- Resistance, continuity and frequency measurements
- Peak, min/max display and data hold function

AC CURRENT CLAMP



DCM320

Item no. 1000-304

- Voltage measurement up to 600 V AC/DC
- Measuring range 0.1 to 400A AC
- Resistance measurement (DCM320)
- Acoustic continuity test
- Data hold function
- Jaw opening 27 mm
- Measurement category CAT III / 600 V



POWER MEASURING CLAMP



DPM1000

- 1000A/1000V AC/DC with AutoSense
- Measurement of active power and power factor
- Inrush for measuring starting currents
- Peak-Max-Min-Avg measurement
- Bluetooth with free iOS/Android app
- CAT IV 600V Safety 1000A/1000V AC/DC
- Harmonics up to the 25th & total harmonic distortion
- Datalogger (9999 readings)
- Total Harmonic Distortion"

SOLAR MEASURING CLAMP



DCM1500S

- 1500V direct current
- 2000V DC (with supplied adapter)
- 1500A AC/DC measurement
- Data acquisition
- Inrush Current
- Bluetooth with free iOS/Android app



MICROOHMMETER WITH 10 A TEST CURRENT



Included accessories: Printed short manual, Detailed operating instructions on CD-ROM, Schuko power supply cable.

DLRO10HD

No lead set

Item no. 1008-657

DLRO10HDX

no lead set

Item no. 1008-065

- 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
- Extensive range of accessories



Robust rotary switches with safe and understandable colour coding



A sturdy hard shell case offers your device space and protection



Easy to use navigation buttons



USB connection

TIME DOMAIN REFLECTOMETER



Included accessories: Carrying case, test probe test set, operating instructions CD

TDR500/3

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 Ohm and a shortening factor between 0.2 and 0.99
- Trace Hold function allows you to save a route on the screen
- High-resolution display
- Very easy operation with joystick
- AUTO selection of gain and pulse width
- Ultra fast pulse for near end fault identification
- Trace hold function
- IP54 protection class for harsh environments
- Ideal for all copper data cables
- CAT IV 600 V input protection
- IP54 rating offers real life working
- AUTO set up mode for instant, easy use
- AutoFind and FindEnd functions helps find the fault fast
- Trace tagging facility that allows a name to be saved with the trace
- Distance dependent gain to counteract signal attenuation
- Step function to improve detection of near end faults



TDR2050

Item no. 1005-022

Included accessories: TDR2000/3P and TDR2050 (retractable case, test lead, 2 pairs, TDR2000/3 and TDR2010 (double miniature terminal test lead set), download kit, carrying case, AC-DC charger, instruction manual CD

- 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

TWO POLE TESTER



TPT320

Item no.

1004-304

- Voltage measurement 12 to 690 V AC / DC
- Continuity check
- 2-pole phase rotation field display
- Digital LC display, LED array
- Bright white LED flashlight
- Measurement category CAT IV / 600 V, CAT III / 1000 V
- Rotary field display can also be operated with safety gloves
- Continuity range the from 0 to 500 k Ω
- Voltage measurements are accompanied by an acoustic signal
- Systems protected by residual current circuit breakers (RCD/FI), Does not trip RCD/FI breakers



MPU690

Item no.

1001-561

- Tests two pole testers
- Step LED indicate test voltages 50 V, 100 V, 230 V, 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



THERMAL IMAGING CAMERA



TC3231

Item no.

1012-514

- Image acquisition frequency 9 Hz
- Thermal sensitivity (NETD) ≤ 150 mK
- Hot & cold spot measurement and tracking
- 6000 image memory
- Date & time stamp saved on images
- Li-Ion battery, rechargeable
- USB interface for downloading images from SD memory
- Automatic shutdown (10 minutes inactivity)
- Standard camera mount
- 32x31 pixels 2.2 inch (55.88mm) TFT-LCD colour screen
- Selectable color palette
- Image blending function
- Visible and infrared image can be mixed 0-100%
- Supplied Micro-SD memory card

NON-CONTACT VOLTAGE TESTER



VF5

VF6

- 12V - 1000V AC Contactless detection
- Ex ib IIB T4 (ATEX) Assessment (VF6)
- Low and medium voltage mode with colour changing LED
- Acoustic, visual and vibration indicator
- High performance flashlight
- CAT IV 1000V
- IP67

E-SCOOTER



E-Scooter Slimline

- Compact & easy to transport (foldable)
- Over 12 km range
- Over 20 km/h fast
- Only 2 hours charging time
- Load capacity up to 100 kg
- LED front and rear light
- Electronic brake
- For private premises



BUNDLE 1

Buy a **DLRO10HDX**
and get the
Thermal Camera
TC3231 for free!



BUNDLE 2

Buy a **MTR105**
and get the
Thermal Camera
TC3231 for free!

Megger Sweden AB
Rinkebyvägen 19
182 36 Danderyd
T: +46 (0) 8 510 195 00
E: seinfo@megger.com

Megger[®]