

Electrical Test Equipment Catalog

Megger[®]



us.megger.com
866-254-0962

2021

Electrical Test Equipment Catalog

FEATURED PRODUCT

new

Meet the DLRO2, the latest in a long line of Megger Ducter™ Low Resistance Ohmmeter products. When it comes to providing confidence in critical connections and joints, low resistance testing is key – ensuring plant reliability, personnel safety, and fire protection.

Packing 2 Amps of output into a hand-held device, the DLRO2 is a convenient, yet powerful solution for on-the-go low resistance testing in even the tightest of spaces. Plus, with a dedicated long test lead mode, the DLRO2, with its optional cable reel test leads, is ideal for testing lightning protection on wind turbines or aircraft bonding and resistance between lightning receptors.

Equipped with a new 'difference meter', the DLRO2 enables you to quickly compare subsequent measurements – ideal for easily identifying faults among similar connections in bus bar joints, cable lugs, or crimps.

Whether you're working in a manufacturing plant or at a switch yard, the DLRO2 is equally at home – providing repeatable test results with ease.

For additional information see page 18.



Electrical Test Equipment Catalog

TABLE OF CONTENTS

5/10/15-KV INSULATION TEST EQUIPMENT.....	4	MET1000 True RMS Electrical Tester	31
MIT1525	4	MPU690 Proving Unit.....	31
MIT5/10/15-kV	5	TIME DOMAIN REFLECTOMETERS.....	32
MIT5/10/15-kV Test Leads.....	6	CFL535G Time Domain Reflectometer	32
2.5 KV INSULATION TEST EQUIPMENT	7	TDR2010 Time Domain Reflectometer	32
MIT2500	7	TDR2050 Time Domain Reflectometer	32
1-KV INSULATION TEST EQUIPMENT	8	CFL510G Time Domain Reflectometer	33
MIT400/2 SERIES	8	TDR500/3.....	33
MIT300 Series	9	CABLE AND PIPE LOCATOR.....	34
MIT200 Series	9	EASYLOC	34
MAJOR MEGGER INSULATION RESISTANCE		OIL TEST SET.....	35
TESTERS	11	Semi-automatic Oil Test Set	35
ADDITIONAL INSULATION TEST EQUIPMENT.....	11	THERMAL CAMERA	35
GROUND RESISTANCE TEST EQUIPMENT	12	TC3231 Thermal Camera	35
DET2/3	12	POWER QUALITY	36
DET3 Contractor Series	13	MPQ1000	36
DET4T2 Enhanced Series	14	Power Quality Simulator	36
DET14C,DET24C clamp-on ground testers.....	16	MPQ1000 Basic KIT	37
Earth Testing Kits.....	17	MPQ1000 SILVER KITS.....	37
MULTIFUNCTION TESTER	17	MPQ1000 GOLD KITS.....	37
MFT70	17	MPQ1000 PLATINUM KITS.....	37
LOW RESISTANCE OHMMETERS.....	18	BATTERY TEST EQUIPMENT	38
DLRO2	18	BITE3.....	38
DLRO-10 and DLRO-10X	19	BITE2 and BITE2P.....	38
DLRO10HD.....	19	PORTABLE APPLIANCE TESTERS	39
DLRO10HDX	19	PAT450	39
DLRO100 Series.....	20	PAT320	39
DLRO10LPU line power unit	21	SPECIALITY TESTING	40
DLRO200 Series.....	21	Cable Height Meter.....	40
General Purpose DLROs	22	High-pot Testers	40
Dual-Pak DLRO.....	22	THREE-PHASE SEQUENCE	41
Single-Pak DLRO	22	Phase Sequence Test Sets	41
Single-Pak/Low-Range DLRO	22	Cable Phasing Meter	41
MOM2 Handheld Micro-ohmmeter	22	MOTOR TEST EQUIPMENT	42
100A Kelvin Clamps.....	24	MTR105.....	42
CATIII 300V Industrial Application Kit	24	Motor & Phase Rotation Test Sets	42
DLRO Leads.....	25	SAFETY TEST EQUIPMENT	43
SOLAR PRODUCTS.....	26	DETEX® Voltage Detectors	43
PVM210 Irradiance Meter.....	26	DETEX® Phasing Testers	43
PVK320 and PVK330 Photovoltaic Kits	27	DETEX® Single-Pole Phase Comparator.....	43
DCM1500S 1500 A Solar clamp meter	27	Piezo Verifiers.....	44
SUBSTATION TEST EQUIPMENT	28	Pneumatic Glove Tester	44
TTR20-1 Transformer turns ratio tester	28	VF2 AC Voltage Detector.....	45
MTO106 Transformer ohmmeter	28	TEST AND MEASUREMENT SOFTWARE.....	46
Single-phase, Hand-crank TTR	29	POWER DB.....	46
MPD Scan Set DIS.....	29	CROSS-REFERENCE GUIDE	47
MULTIMETERS/CLAMP METERS.....	30		
DCM305E.....	30		
DCM310, DCM320, DCM340 Clampmeters.....	30		
DCM1500 1500 A TRMS clamp meter.....	30		
DCM330 Forkmeter	30		
DPM1000.....	30		
AVO830, AVO835 True RMS Multimeter	31		
TPT420 CATIV 1000V 2 Pole Tester	31		



**PRODUCTS MARKED WITH THIS LOGO
WERE MANUFACTURED IN AN ISO 14001
COMPLIANT FACILITY.**

Electrical Test Equipment Catalog

5/10/15-KV INSULATION TEST EQUIPMENT



Equipment with operating voltages above 1 kV requires commensurately higher test voltages. Therefore, to be fully in conformance with the most modern testing requirements, Megger offers a family of high-quality insulation testers at voltages above 1 kV. At the core of high-voltage testing, our 5/10/15 kV units afford the highest level of quality testing along with prime safety, convenience and portability.

For complete insulation testing capability of all high-capital equipment, Megger goes one step further! The universal testing standard for rotational equipment, IEEE 43-2000, increased the test voltage recommendation to 10 kV for equipment rated 12 kV and above. Full compliance with this standard can be attained with just one tester, our 10 kV model.

MIT1525



The Megger MIT1525 is a 15 kV insulation tester with a full range of DC insulation test modes and the ability to save summary readings, in addition to logging results to on-board memory once every five seconds. Real-time streaming data can be captured on a laptop/tablet at a rate of once a second. The MIT1525 timer settings are set to reference timings contained in IEEE 43 and IEEE 95 standards, but a user can change timer settings to suit their particular test requirement.

The MIT1525 has been designed, specified, and tested to meet international requirements in the industrial and OEM market sectors. In addition to being a tough, high performance insulation tester, the MIT1525 offers the ability to perform accurate insulation resistance measurements up to 15 kV test voltage with a maximum resistance of 30 TΩ. Resistance measurement accuracy is $\pm 5\%$ from 1 MΩ to 30 TΩ!

For utilities and service companies the MIT1525 is an all-around tester with its flexibility and future proofing capability. The Megger MIT1525 is designed to work wherever you work.

- **15 kV test voltage** – increases test current, helping to avoid negative current when testing high resistance insulation
- **CATIV 1000 V safety** on all test terminals to 3000 m
- **Rapid charge** of capacitive loads such as HV power cables
- **Always ready to test** with Li-ion fast charge battery or from an ac source
- **Designed to be durable and survive** in the harshest of environments
- **High noise immunity** 6 mA
- **High 3 mA short circuit current**
- **Download/stream results**
- **2 year warranty**



WHY TEST AT 15 KV?

- **5 kV to 15 kV will triple test current** - this can prevent negative test current in the presence of high noise.
- **15 kV is specified for assets** for 35,000 V to 69,000 V based on NETA ATS 2007.
- **Motors above 34,500 V should be tested** at 15 kV based on NETA ATS 2007.

See ordering information on page 6.

For full details on these or any other products:



VIEW DATASHEETS

<https://bit.ly/MeggerDatasheets>

Electrical Test Equipment Catalog



The **MIT515, MIT525, and MIT1025** are the ideal instruments for industrial plant maintenance, commissioning, and industrial/OEM use. Typical applications include insulation testing of:

- Transformers
- Cables and industrial/OEM testing
- Substation equipment
- Quality control

All models are CATIV 600 V safety rated on **all** terminals and assembled in a rugged IP65 dual case. To ensure operation in electrically noisy environments, the units have a 3 mA noise filtering capability.

In order to quickly charge capacitive loads and cables the units not only have 3mA short circuit current but have “max power regulation technology” which provides faster charge times and ensures that correct voltage is maintained even at low load impedances outstripping the performance of many 5 mA instruments.

Test results are easily identified with the convenient and useful date and time stamp function providing essential traceability. Saved test data can be easily transferred via a 10-kV isolated USB device interface to PowerDB Lite software supplied with the MIT525 and MIT1025. New driver technology provides plug-and-play connection when connected to the internet.

Like all Megger 5/10 kV insulation testers, these units are housed in Megger's dual case. This unique design allows for fire retardant protection without sacrificing ruggedness. They also include Megger's industry best guard terminal.

These highly reliable and low maintenance products reduce the cost of ownership. Their unrivalled practicality performs even the most rigorous testing.

See ordering information on page 6.

For full details on these or any other products:



VIEW
DATASHEETS

<https://bit.ly/MeggerDatasheets>



Electrical Test Equipment Catalog

ORDERING INFORMATION FOR 5/10/15-KV INSULATION TESTERS

Cat. No.	Max Test Voltage	Max Reading	Download
MIT515	5.0 kV	10 TΩ	NO
MIT525	5.0 kV	10 TΩ	YES
MIT1025	10.0 kV	20 TΩ	YES
MIT1525	15.0 kV	30 TΩ	YES

* 10 V Steps 40 V to 2 kV; 25 V steps 1 kV thru 15 kV

For full details on these or any other products:



VIEW
DATASHEETS

<https://bit.ly/MeggerDatasheets>



ORDERING INFORMATION FOR 5/10/15-KV TEST LEADS

Cat. No.	Description
6220-861	30 ft (10 m) lead set, 10 kV screened, compact clips
6220-833	50 ft (15 m) lead set, 10 kV screened, compact clips
6220-834	10 ft (3 m) lead set, 10 kV screened, compact clips
1008-023	10 ft (3 m) lead set x 3, large 15 kV insulated clips for MIT1525 ONLY
1002-534	10 ft (3 m) lead set 10 kV insulated clips (set of 3)
1008-022	lead set 3kV medium clips (3 x 3 m) for 515/525/BM5200
6220-822	10 ft (3 m) control circuit lead set 1 kV for 5/10 kV ; 1 kV clips
6311-080	50 ft (15 m) 5 kV screened uninsulated small clips
1002-913	Fused 1 kV leadset for all 5/10/15kV Insulation Testers
1002-645	16.5 ft (5 m) lead set x 3, large insulated clips for 5 kV & 10 kV
1002-646	26.4 ft (8 m) lead set x 3, large insulated clips for 5 kV & 10 kV
1002-647	10 ft (10 m) lead set x 3, large insulated clips for 5 kV & 10 kV
1002-648	50 ft (15 m) lead set x 3, large insulated clips for 5 kV & 10 kV
1002-641	16.5 ft (5 m) lead set x 3, medium insulated clips for 5 kV & 10 kV
1002-642	26.4 ft (8 m) lead set x 3, medium insulated clips for 5 kV & 10 kV
1002-643	30 ft (10 m) lead set x 3, medium insulated clips for 5 kV & 10 kV
1002-644	50 ft (15 m) lead set x 3, medium insulated clips for 5 kV & 10 kV
1005-817	65 ft (20 m) Leadset x 10kV Screened 20m for 5 kV & 10 kV
1003-201	80 ft (25 m) Leadset x 3 10 kV large size insulated clips for 5 kV & 10 kV
1003-202	100 ft (30 m) Leadset x 3 10 kV large size insulated clips for 5 kV & 10 kV
1005-259	15 kV Leadset 15 kV Plug 3x 5 m, 15kV Clip for MIT1525 only
1005-260	15 kV Leadset 15 kV Plug 3x 10 m, 15kV Clip for MIT1525 only
1005-261	15 kV Leadset 15 kV Plug 3x 15 m, 15kV Clip for MIT1525 only
1005-262	6 kV Leadset 15 kV Plug 3x 3 m, Medium Clip for MIT1525 only
1005-263	6 kV Leadset 15 kV Plug 3x 10 m, Medium Clip for MIT1525 only
1005-264	1 kV Control Leadset 15 kV Plug 2x 3 m for MIT1525 only
1005-265	1 kV Fused Leadset 15 kV Plug 2x 1.25 m for MIT1525 only
1005-266	15 kV Screened 3 m Leadset, 15 kV Clip for MIT1525 only
1005-267	15 kV Screened 10 m Leadset, 15 kV Clip for MIT1525 only
1005-268	15 kV Screened 15 m Leadset, 15 kV Clip for MIT1525 only
1005-269	15 kV Screened 20 m Leadset, 15 kV Clip for MIT1525 only

2.5 KV INSULATION TEST EQUIPMENT

The MIT2500 insulation and continuity tester has been designed for Electrical and Industrial test applications, where operation voltages exceed 1000 V and higher insulation test voltages are needed.

The MIT2500 offers both fixed range voltages of 50 V, 100V, 250 V, 500 V, 1000 V and 2500 V, as well as a variable range that allows any voltage between 50 V and 2500 V to be "dialed in". This is supported by the test voltage feedback control, which maintains the output test voltage to within 2% of the selected range, even when under test.

The MIT2500 uses the redesigned case, back-stand, and 6 cell battery compartment, as well as incorporating a guard terminal to reduce surface tracking currents that reduce accuracy at higher voltages.

All instruments are over-molded for increased protection and achieve an IP54 weatherproof rating.

MIT2500

- Insulation testing up to 2.5 kV and 200 GΩ range in a hand held instrument
- Guard terminal for high resistance accuracy
- Adjustable insulation test voltage from 50 V to 2500 V
- Stabilized insulation test voltage
- Rechargeable options for ac and car charging
- Single range, faster continuity testing from 0.01 Ω to 1 MΩ
- Polarization Index (PI) & Dielectric Absorption Ratio (DAR)
- CAT IV 600 V applications
- Optional magnetic strap available

ORDERING INFORMATION FOR MIT2500			
Cat. No.	Model	Description	Warranty (years)**
1006-764	MIT2500	2.5 kV Insulation Resistance Tester	1

** Extended warranty available for some products



Optional Magnetic Strap, Cat. No. 1010-013



Electrical Test Equipment Catalog

1-KV INSULATION TEST EQUIPMENT

Megger is the originator of insulation resistance testing and the world recognized leader in this area. The first instrument to perform such testing was introduced over 130 years ago. Based on valuable customer feedback and our many years

of experience, we offer a complete range of 1-kV insulation testers — the MIT200 Series, MIT300 Series and the MIT400/2 Series — designed to meet the varying needs and budgets of all types of customers.



CAT IV 600 V RATED

The MIT430/2 offers result storage, recall and Bluetooth downloading



Can also be used in solar applications when paired with the PV test lead kit. See page 26 for additional information.

The MIT400/2 series insulation and continuity testers are designed not just for Electrical and Industrial, but with an exceptionally wide range of applications from electrical installations, cable testing, motor testing, automotive, ESD, panel building, avionics, maintenance, etc.

Insulation testing has been enhanced with feedback controlled test voltages to limit over-voltage to 2%, rather than the industry standard 10-20%.

A variable range allows any intermediate voltage from 10 V to 1000 V, where application-specific test voltages are required that do not appear in the standard ranges.

MIT400/2 SERIES



- Insulation testing up to 1000 V and 200 GΩ range
- Stabilized insulation test voltage
- Single range, faster continuity testing from 0.01 Ω to 1 MΩ
- 600 V Trms ac and dc voltage measurement
- Live circuit detection and protection
- User variable insulation test voltage from 100V to 1000V, depending on model
- Test result storage and Bluetooth® downloading, depending on model
- Rechargeable options for ac and car charging, depending on model
- CAT IV 600 V & IP54
- Available magnetic strap



ORDERING INFORMATION FOR MAGNETIC STRAP

Cat. No.	Description	
1010-013	Magnetic Strap	

Continuity testing and a single auto-ranging 0.01 Ω to 1.0 MΩ function replaces the “ohms” and “kOhms” ranges. Retained are the 200 mA and 20 mA test options.

Replacing the original MIT400 instruments the units feature a redesigned case, back-stand, and 6 cell battery compartment with separate fuse access. All instruments are over-molded for increased protection and achieve an IP54 weatherproof rating.

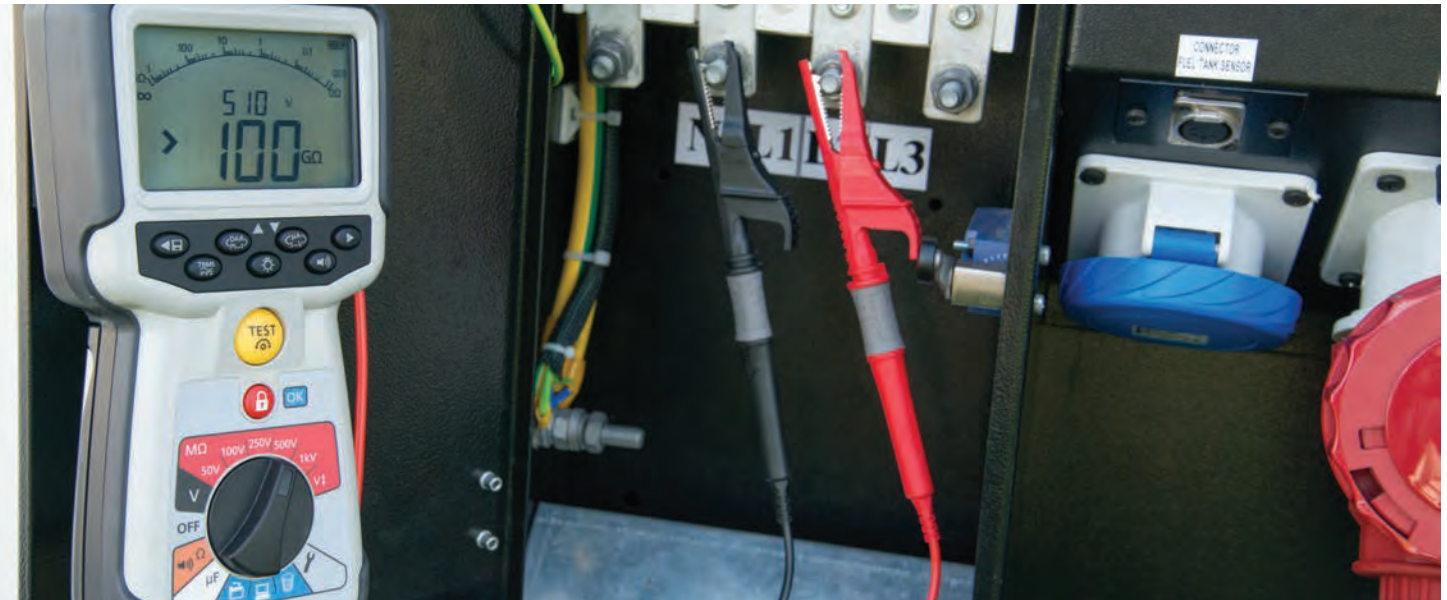
See ordering information on page 9.

Electrical Test Equipment Catalog

SELECTION GUIDE FOR MIT400/2 SERIES

Cat. No.	Primary Market	Test Voltages	Max. Ω Reading	Download via Bluetooth®	Cal Certification	Warranty**
MIT400/2	Industrial	250, 500, 1000 V	50, 100, 200 G Ω	NO	YES	2 years
MIT410/2	Industrial	50, 100, 250, 500, 1000 V	10, 20, 50, 100, 200 G Ω	NO	YES	2 years
MIT420/2	Industrial	50, 100, 250, 500, 1000 V plus variable	10, 20, 50, 100, 200 G Ω	NO	YES	2 years
MIT430/2	Industrial	50, 100, 250, 500, 1000 V plus variable	10, 20, 50, 100, 200 G Ω	YES	YES	2 years
MIT410TC3	Telecom	50, 100, 250, 500 V	10, 20, 50, 100 G Ω	NO	YES	2 years
MIT481/2	Telecom	50, 100, 250, 500 V	10, 20, 50, 100 G Ω	NO	YES	2 years
MIT485/2	Telecom	50, 100, 250, 500 V	10, 20, 50, 100 G Ω	YES	YES	2 years

** Extended warranty available for some products



MIT300 SERIES

The MIT300 Series of insulation testers includes five models to meet the needs of electrical contractors. They incorporate features such as automatic discharge, audio-visual warnings, and test inhibition to ensure operator safety and protection from accidental misuse.

The MIT310 adds a voltmeter function. The MIT320 has a backlight, illuminated panel, k Ω range, limit alarm, and an adjustable continuity buzzer. The MIT330 can store up to 1000 test results. The MIT310A features a genuine mechanical analog display.


The MIT300, MIT310, MIT320, and MIT330 feature an exclusive analog/digital display that clearly shows measurement results.


MIT200 SERIES

The MIT200 is one of the smallest insulation testers available on the market today. With four product options available, all the MIT200 instruments offer a range of safety and operation features expected from a Megger tester. The combined analog pointer and digital readout provide both accuracy and charge/discharge characteristics.

Voltage warning and display, plus voltage lockout protect both the user and the instrument, if accidentally connected to a live circuit. The MIT200 Series meet a wide range of international testing standards as well as BSEN 61557 and IEC61010.

Electrical Test Equipment Catalog

SELECTION GUIDE FOR MIT300 SERIES						
	Cat. No.	Model				
		MIT300-EN	MIT310-EN	MIT320-EN	MIT330-EN	MIT310A-EN Analog
Insulation testing	250 V	■	■	■	■	■
	500 V	■	■	■	■	■
	1000 V		■	■	■	■
	Range to 999 MΩ	■	■	■	■	■
	Insulation limit alarm (0.01 MΩ to 999 MΩ)			■	■	
Continuity testing	Continuity to 100Ω	■	■	■	■	■
	Continuity buzzer	■	■	■	■	■
	Lead null to 9Ω	■	■	■	■	0.5Ω
	Adjustable buzzer 1 to 20 Ω			■	■	
	Audible buzzer disable			■	■	
Resistance measurement	10 Ω to 1 MΩ range			■	■	
	0 Ω to 2 KΩ range					■
General	Voltage warning	■				
	Default voltmeter		■	■	■	■
	Backlit display			■	■	
	Backlight selector ranges			■	■	
	Locking test button	■	■	■	■	■
	Auto power-down	■	■	■	■	
	Switched test probe			■	■	
	IP54 weatherproof	■	■	■	■	■
	1000 test result storage				■	
	Downloading				■	
	Calibration certificate	■	■	■	■	■
	Warranty (years)**	1	1	1	1	1
		■	■	■	■	■

SELECTION GUIDE FOR MIT200 SERIES					
	Cat. No.	Model			
		MIT200-EN	MIT210-EN	MIT220-EN	MIT230-EN
Insulation testing	250 V			■	■
	500 V	■		■	■
	1000 V		■		■
	1000 MΩ range	■	■	■	■
	Auto-ranging	■	■	■	■
	Auto discharge	■	■	■	■
	Test inhibit	■	■	■	■
	Live circuit voltage display	■	■	■	■
Continuity testing	Continuity @ >200 mA	■	■	■	■
	Continuity to 0.01 Ω	■	■	■	■
	Test lead null (9.99 Ω)	■	■	■	■
	Automatic continuity test	■	■	■	■
	Continuity buzzer with 5 Ω threshold	■	■	■	■
	Default volts warning	■	■	■	■
General	Digital display + arc	■	■	■	■
	Battery condition	■	■	■	■
	Auto power down	■	■	■	■
	Tough carry case	■	■	■	■
	Test leads	■	■	■	■
	CATIII 600 V	■	■	■	■
		■	■	■	■
Warranty (years)**		1	1	1	1

** Extended warranty available for some products



Model MIT230-EN

** Extended warranty available for some products

For full details on these or any other products:




VIEW DATASHEETS

<https://bit.ly/MeggerDatasheets>

Electrical Test Equipment Catalog

MAJOR MEGGER INSULATION RESISTANCE TESTERS

This specialty line of instruments has become synonymous over the years for fine craftsmanship, something you have come to expect from Megger. These instruments continue to be very popular today with a choice of three outstanding models.

SELECTION GUIDE FOR MAJOR MEGGER MODELS								
	Cat. No		Test Voltage (V dc)	Insulation Resistance	Resistance range	Power source	Warranty (Years)**	
General Purpose	212159	■	100, 250, 500, 1000	0 to 2000 MΩ	0 to 5000 Ω	Hand-cranked	1	
	212359	■	100, 250, 500, 1000	0 to 2000 MΩ	0 to 5000 Ω	Line/Hand-cranked	1	
High resistance	210170	■	100, 250, 500, 1000	0 to 20,000 MΩ	0 to 5000 Ω	Hand-cranked	1	





General Purpose Model



High Resistance Model

** Extended warranty available for some products

ADDITIONAL INSULATION TEST EQUIPMENT

	Cat. No.	Test Voltages	Warranty (Years)**	Features
 BM5200	1001-289	250, 500, 1000, 2500, 5 kV	1	<ul style="list-style-type: none"> 1 TΩ, 1.4 mA, 5 kV digital insulation tester with digital and analog display Five test ranges: 250 V, 500 V, 1000 V, 2500 V and 5000 V Insulation, Polarization Index and variable timed test modes Selectable DC or AC (including frequency) voltmeter functions Guard terminal to shunt surface leakage currents CATIII 600 V safety rating
 MJ15	MJ15	500, 1000, 2500, 5 kV	1	<ul style="list-style-type: none"> Pass/Fail overlays for rapid "go/no go" testing and trend analysis Insulation resistance to 20 GΩ Voltage range to 600 V indicates auto discharge MJ15 hand-cranked and battery operated BM15 battery powered only
	BM15			

** Extended warranty available for some products

For full details on these or any other products:



Electrical Test Equipment Catalog

GROUND RESISTANCE TEST EQUIPMENT

Megger is the expert in ground resistance testing. From time saving clamp-on ground testers to specialty models for high sensitivity testing, we have the ground resistance tester to fit your application and budget.

The Megger line of ground resistance testers provides high accuracy, a broad testing range, and fast, reliable measurements. Megger ground testers are easy to use and lightweight.

The next few pages will outline the full line of ground testing equipment that Megger has to offer.

Our staff of professionals will help with your technical grounding questions and recommend the ground tester that best fits your need. Call us at 866-254-0962 or search the web at us.megger.com.

DET2/3



The DET2/3 is a robust and compact advanced earth/ground test instrument designed to measure Earth electrode resistance and soil resistivity. The DET2/3 is a tester for use on large or more complex earth/ground systems, which include power stations, substations, railways, communication systems, and difficult test environments.

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

DET2/3 SERIES SELECTION GUIDE

Cat. No.	Description	Warranty
DET2/3	DET 2/3 ground tester without leads	1
1008-969	DET 2/3 ground tester plus lead kit - 50 m	1
1008-989	DET 2/3 ground tester plus lead kit - 100 m	1

** Extended warranty available for some products



The Megger Earth Test Kit (above) can be used with Megger ground testing models DET2/3, DET3 and DET4. For more information see page 17.



Electrical Test Equipment Catalog

DET3 CONTRACTOR SERIES



The DET3 Series of digital ground testing instruments from Megger is comprised of two models: an instrument for grounding and bonding tests and a unit that adds a current measuring function. With this added function, current on the ground rod can be measured for improved personnel safety and noise detection. The DET3TC includes the ART (Attached Rod Technique) method of testing, which greatly reduces testing time.

These Megger digital ground testers are powered by eight AA batteries which give excellent testing time — the status of the batteries is given by a bar graph on the LCD. The Megger DET3 Series earth/ground testers is designed to meet stringent safety standards and is rated CAT IV 100V.

Each DET3 comes complete with test leads, stakes, batteries, calibration certificate, and rugged polypropylene carry case.



DET3 SERIES SELECTION GUIDE		
	DET3TC	DET3TD
2-wire resistance	■	■
3-wire resistance	■	■
ART (attached rod technique) resistance measurement	■	
Resistance range	0.01 to 2000	0.01 to 2000
	2% ± 3d	2% ± 3d
Ground voltage range	0 to 100 V	0 to 100 V
Ground current range (with optional current measuring clamp)	0.5 mA to 19.9 A	
Warranty (years)**	1	1

** Extended warranty available for some products

WHAT'S IN THE DET3T NAME?

DIGITAL EARTH TESTER 3 TERMINAL

D - Disposable Battery

C - Works with MCC1010 (optional)

DET3TC works with MCC1010 (not included)

For full details on these or any other products:

VIEW DATASHEETS

<https://bit.ly/MeggerDatasheets>

Electrical Test Equipment Catalog



DET4T2 ENHANCED SERIES



These ground testers from Megger offer a comprehensive solution to ground resistance and soil resistivity testing needs. The instruments provide such functions as 2 pole, 3 pole, 4 pole, Attached Rod Technique (ART), stakeless, leakage current, and ground noise voltage measurements. All models now include selectable output voltage (25 V or 50 V). The DET4TC2 and DET4TCR2 offer four selectable test frequencies (94, 105, 111 and 128 Hz) for improved testing in noisy environments.

An optional MCC1010 augments the traditional fall-of-potential measurement method with ART, which allows electrode testing without disconnection and also leakage current measurement down to 1 mA. The MCV1010, a second optional clamp, enables true stakeless measurements to be made where driving a stake is not practical.

The DET4TC2 and DET4TD2 are powered by eight AA batteries which give excellent testing time. The DET4TR2 and DET4TCR2 are powered from rechargeable AA cells. For added convenience on all four units, the battery status is displayed using a bar graph.

The Megger DET4T2 Series earth/ground testers is designed to meet stringent safety standards and is rated CAT IV 100V.

THE ART OF GROUND TESTING

Ground testing using the ART (Attached Rod Technique) method is more convenient and reduces testing time. Models DET3TC, DET4TC2 and DET4TCR2 include this additional testing capability.

A nagging problem with traditional ground testing has been the requirement to disconnect the utility connection. Using the ART method you can reliably measure a grounding electrode while still connected and prove it!

The ART method is more convenient and significantly reduces your testing time by as much as 40 percent.

The DET4TC2 and DET4TCR2 offer ART capability, as well as stakeless testing and of course 4, 3, and 2 pole testing.

See ordering information on page 15.

WHAT'S IN THE DET4T NAME?

DIGITAL EARTH TESTER 4 TERMINAL

- R** - Rechargeable Battery
- D** - Disposable Battery
- C** - Works with Clamp
- 2** - Second generation

For full details on these or any other products:



Electrical Test Equipment Catalog

DET4T2 SERIES SELECTION GUIDE					
	Model No.	DET4TD2	DET4TR2	DET4TC2	DET4TCR2
	Cat. No.	1000-347	1000-324	1000-345	1000-346
Tests	2-pole measurement	■	■	■	■
	3-pole measurement	■	■	■	■
	4-pole measurement	■	■	■	■
	Soil resistivity	■	■	■	■
	ART (attached rod technique) capability			■	■
	Stakeless (clamp-on) measurement capability			■	■
	Resistance range	0.01 to 20,000 Ω		0.01 to 200,000 Ω	
	Ground voltage range	0 to 100 V			
	Ground current range (with MCC1010) capability	0.5 mA to 19.9 A			
Output	Selectable voltage (25/50 V)	■	■	■	■
	Test frequency	128 Hz		94, 105, 111, 128 Hz	
Power supply	Alkaline batteries	■		■	
	Rechargeable batteries		■		■
Noise rejection	40 V peak-to-peak	■	■	■	■
Safety rating	CAT IV 100 V	■	■	■	■
Ingress protection	Rated to IP54	■	■	■	■
Included accessories	Hard carry case	■	■	■	■
	Test leads (50 ft, 30 ft, 10 ft) and spikes	■	■	■	■
	External ac/dc adapter		■		■
	Certificate of calibration	■	■	■	■
Warranty (years)**		1	1	1	1

** Extended warranty available for some products

DET4T2 SERIES ACCESSORIES SELECTION GUIDE										
Model No.	Cat. No.	Included Accessories						Battery		
		Hard carry case	4 Right-angle terminal adapters	Leads & spikes	External ac/dc Adapter	Field Calibrator	MCC1010 and MCV1010	Disposable	Rechargeable	
DET4TD2	1000-347	■	■	■				■		
DET4TR2	1000-324	■	■	■	■				■	
DET4TC2	1000-345	■	■	■				■		
DET4TC2+Clamps	1000-365	■	■	■		■	■	■		
DET4TCR2	1000-346	■	■	■	■				■	
DET4TCR2+Clamps	1000-366	■	■	■	■	■	■		■	

** Extended warranty available for some products

Electrical Test Equipment Catalog

DET14C AND DET24C CLAMP-ON EARTH/GROUND TESTERS



The DET14C and DET24C are advanced clamp-on ground testers used for measuring resistance of ground rods and associated installations. These instruments induce a test current into ground systems and measure ground resistance in multi-earth installations without the need to disconnect the electrical system. The technique effectively measures a loop resistance.

Hard-to-reach ground spikes are easily accessed with the instrument's short body length, a unique pre-test hold function, and display backlight for low light environments. The elliptical head shape greatly improves capacity enabling round cables up to 37 mm diameter and earth tapes (flat strip conductors) up to 50 mm wide to be clamped.

Good reliability is provided with smooth, flat core mating surfaces to prevent dirt build-up and ensure measuring integrity, and an extremely high battery life (24 hours continuous).

Both instruments feature date- and time-stamped test result storage reviewable on the large dual display. The DET24C offers a larger memory plus PC download capability.

- Elliptical clamp shape with 39 mm x 55 mm inner jaw dimensions
- Low maintenance flat jaw interface
- Excellent safety rating of CAT IV 600V
- Automatic noise current warning safety feature
- Resistance and current ranges - auto ranging
- Automatic noise filter function
- Backlit display
- DET24C includes Bluetooth® and PowerDB Lite software
- 1 year warranty

These instruments are supplied in a hard carry case together with a calibration check loop, 4 x AA alkaline batteries, quick-start guide, and a full user guide on a CD. The DET24C is supplied with Bluetooth® and Power DB Lite software on CD.



Smooth mating jaw surface



Large elliptical jaw allows testing at any angle



Backlit display



Largest jaw opening on the market

These instruments cannot be used to test an isolated electrode.

SELECTION FOR DET14C AND DET24C					
Model	Cat. No.	Ground resistance range	Power source	Memory capacity	Warranty (years)**
DET14C	1000-761	0.05 Ω to 0.99 Ω	Battery	256 records	1
DET24C	1007-331	1.00 Ω to 9.99 Ω 10.0 Ω to 99.9 Ω 100.0 Ω to 199.9 Ω 200 Ω to 400 Ω 400 Ω to 600 Ω 600 Ω to 1200 Ω 1200 Ω to 1500 Ω		2000 records downloadable via Bluetooth	1

** Extended warranty available for some products

Electrical Test Equipment Catalog



EARTH TESTING KITS



The Megger Earth Test Kit (ETK models) are designed to be as practical as possible. Housed in an ergonomically-designed bag, the kits are stored neatly, well protected and easy to transport. The test leads are fitted and retained on wheels for ease of use. Simply pull out the test lead from the ground testing instrument to the test point, clip the end directly into the spike, and test. When testing is complete, unclip the test leads and wind them in. The reels can be daisy chained, providing longer lengths in manageable extensions. The manageable extensions make reels lighter and easier to carry, helping to quickly resolve any connectivity issues.

The Megger Earth Test Kits can be used with Megger ground testing models DET2/3, DET3, and DET4.

ORDERING INFORMATION FOR ETK				
Model	Cat. No.	Description	Warranty (years)**	
ETK50	1010-177	156 ft. (50 m) cable and spike kit	1	
ETK100	1010-178	330 ft. (100 m) cable and spike kit	1	
ETK50C	1010-179	156 ft. (50 m) cable, spike and clamp kit	1	
ETK100C	1010-180	330 ft. (100 m) cable, spike and clamp kit	1	

** Extended warranty available for some products

MULTIFUNCTION TESTER

MFT70



The MFT70 Multifunction Tester is designed for testing low voltage electrical installations to fulfill the requirements of NFPA70 and the National Electrical Code. It provides all the tests required to complete the necessary electrical certification for industrial, commercial and domestic fixed wiring installations, including:

- TRMS voltage and frequency measurement
- Insulation test at 100 V, 250 V, 500 V and 1000 V
- Continuity resistance at 200 mA or 15 mA
- Resistance range up to 100 kΩ
- GFCI test
- Phase rotation indicator
- Ground testing
 - 2-pole and 3-pole
 - Attached Rod Technique (ART)
 - Stakeless testing



ORDERING INFORMATION FOR MFT70				
Model	Cat. No.	Description	Warranty (years)**	
MFT70	1007-044	Multifunction Tester	1	

** Extended warranty available for some products

Electrical Test Equipment Catalog

LOW RESISTANCE OHMMETERS

Megger has been manufacturing low resistance ohmmeters for many decades. In fact, the first low resistance ohmmeter was launched in 1908. The first low resistance ohmmeter used a cross-coils meter movement.

Today, Megger has a comprehensive range of Low Resistance Ohmmeters, providing accurate and reliable measurements with test currents ranging from a few μA to 600 A suitable for many applications.

new

DLRO2

Get fast, accurate, repeatable measurements - even in noisy environments - with the DLRO2 hand-held 2 Amp low resistance ohmmeter.

The DLRO2 can measure low resistance values across a wide range of applications, from railways and aircraft to industry components. This tough device comes with a brand new 'difference' meter that allows repetitive measurements to be easily compared with an initial reference measurement. The difference meter also translates the percentage difference to a needle/pointer movement, making the changes clear to see.

If your applications require long test leads, then the DLRO2 can provide this without compromising test speed or safety. It has a dedicated long lead test to optimize the output, and this long test lead function is able to provide up to 1 A of test current into 4 ohms resistance. The DLRO2, with its optional cable reel test leads, is therefore ideal for testing wind turbine and avionic lightning protection applications.

- **New Difference Meter for quick data comparisons**
- **Use long leads at 1 A without compromising test speed**
- **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 CATIII 600 V/CATIV 300 V**



ORDERING INFORMATION FOR DLRO2

Model	Cat. No.	Description	Warranty (years)**
DLRO2	1012-280	2 Amp Handheld Ducter™ Low Resistance Tester	1

For full details on these or any other products:



Electrical Test Equipment Catalog

DLRO-10



DLRO-10X

10 AMP MODELS

DLRO-10 AND DLRO-10X



The DLRO-10 and DLRO-10X are built into a strong, lightweight case that is equally suitable in the field or in the laboratory. Light enough to be worn around the neck, they are small enough to be taken into areas which were previously too small to access. The DLRO-10 uses a large, bright 4½-digit LED display, while the DLRO-10X has a large, backlit LCD.

The DLRO-10 displays the average of measurements achieved using forward and reverse current, while the DLRO-10X displays both individual measurements and the average. The DLRO-10X uses a menu system controlled by a two-axis paddle to allow the user to manually select the test current. The unit also adds real-time download of results and on-board storage for later download to a PC.

See ordering information on pages 23/24.

See page 21 for a convenient accessory for the DLRO10 and DLRO10X.



DLRO10HD



Common with the DLRO10 series, the DLRO10HD features output power limiting to 0.25 W so as not to heat the test piece. However, the DLRO10HD has the additional benefit of combining this with two high-power*, high-compliance ranges. Benefits include the ability to use much longer test leads if required, the ability to heat and, therefore, identify circuit weakness. In addition, with the ability to maintain 10 A for at least a minute, this allows for improved testing of inductive loads.

The DLRO10HD is designed to operate in the harshest of conditions, surviving knocks, drops, dusty, and wet conditions. It can be used in the rain, and with the lid closed, is sealed to IP65. There is no need to worry about inadvertent connection to live supplies. High input protection shrugs it off without even blowing a fuse.

The DLRO10HD is battery powered, and is equally convenient at home running on a line supply, even while charging the battery. This means the instrument is at home in manufacturing environments, never having to wait for the battery to charge. The DLRO10HD is always ready to test.

*25 W

See page 24 for industrial application kit



DLRO10HDX



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.

- Onboard memory storage for test results up to 200 records
- Interchangeable test lead terminations

See page 24 for industrial application kit

Electrical Test Equipment Catalog

DLRO100 SERIES

The Megger DLRO100 series offers a unique range of 100 A digital low resistance testers. Never before has CATIV 600 V safety, operational IP54 ingress protection for dust and water, and lightweight, fast charge (2.5 hr), Li-ion battery technology been available on a continuous 100 A low resistance tester.

Providing low resistance measurements across a multitude of applications, including areas without access to line power, the DLRO100 is extremely flexible.

Applications include:

- Switchgear
- Circuit breaker
- Contact resistance
- Bus bar and cable joints
- Wire and cable resistance
- Lightning conductor bonding
- Welded joints
- Ground connections and joints



Megger has taken a no-compromise approach when designing the new DLRO100 series. The range offers a unique combination of features with everything including DualGround™ testing, adjustable current ramping, high noise immunity, high power 100 A continuous testing, and even remote control, yet still manages to be small and lightweight.

There are three models in the series. All three models can be line powered, are rated CAT IV 600 V, and can test with currents from 10 to 110 A. "B" in the model name indicates the battery powered option (in addition to ac power).

- **DLRO100 E or EB** - The base model. B in the model name indicates the battery powered option.
- **DLRO100 X or XB** - This model includes all features in the basic model, with added data storage and DualGround™ testing capability.
- **DLRO100 H or HB** - The top-of-the-line model includes features in the E and X models, with asset tagging (enter unique asset ID's using the DLRO100 Asset Tag Windows app), Bluetooth® download and USB remote operation.

NOTE: The DLRO100 Units are not supplied with leads included.



A user replaceable high power lightweight Li-ion battery provides, from a single charge, 200 Manual/Auto 100 A tests or up to two 10 minutes continuous 100 A tests and takes 2.5 hours to charge when fully discharged.



A terminal adapter has been designed to enable the use of user's own test leads.



A tough adjustable clamp has been designed to ensure flexibility in many applications and provides a good connection with the test piece.

See ordering information on page 23.

OPTIONAL ACCESSORY

DLRO10LPU LINE POWER UNIT



The DLRO10 and DLRO10X can now be powered from a mains / line power supply.

The DLRO10LPU unit is simply fitted to the instrument in place of the standard battery pack.

When in use a red LED is illuminated when the instrument is powered from a mains/line power supply.

**This option also works with the BITE3. See page 38.*



ORDERING INFORMATION FOR LINE POWER UNIT		
Cat. No	Item	
1003-171	DLRO10LPU-US Mains power attachment - US plug	

DLRO200, DLRO200-NLS, DLRO200-115 AND DLRO200-115-NLS



- Small and weighs less than 33 lbs
- Test currents from 10 A to 200 A dc
- 0.1 $\mu\Omega$ best resolution
- On board memory for up to 300 test results and notes
- RS232 port to download stored results or for real time output to a printer
- Supplied with download software
- Models DLRO200-EN and DLRO200-115 come complete with 5m test leads

See ordering information on page 23.



DLRO200

For full details on these or any other products:

VIEW DATASHEETS

<https://bit.ly/MeggerDatasheets>

Electrical Test Equipment Catalog

GENERAL PURPOSE DLROS (247000 SERIES)



Three models designed for general purpose testing applications. All units in this family feature digital readout, offer a resolution to 1 $\mu\Omega$ or better, and have a basic accuracy of $\pm 0.25\%$.

Dual-Pak DLRO (Cat. No. 247000)

- Separate measuring and charging modules
- Weighs less than 8 lbs (3.6 kg)
- Rechargeable battery with separate charger for hours of testing

Single-Pak DLRO (Cat. No. 247001)

- Measuring circuits, rechargeable batteries, and charger in one self-contained unit
- Housed in a tough case with hinged, removable lid and carrying handle
- Includes captive wing nuts

Single-Pak/Low-Range DLRO (Cat.No. 247002)

- Features a current-reversing switch to average out voltage offset
- Includes captive wing nuts
- Adds an extra decimal of resolution

See ordering information on page 23.

MOM2 HANDHELD MICRO-OHMMETER

- Up to 220 A
- Battery powered
- Lightweight – 1 kg
- Safe test – DualGround™
- Auto range: 1 $\mu\Omega$ to 1000 m Ω
- Bluetooth® PC communication
- Complies with IEEE and IEC standards

The MOM2 Micro-ohmmeter is designed to measure the resistance of circuit breaker contacts, bus-bar joints, and other high-current links. It uses an ultra capacitor to generate the high output current. The ultra capacitor is able to store a huge amount of energy compared to conventional capacitors and can deliver very high current during the discharge. The micro-ohmmeter can be used anywhere to measure a low resistance value with high accuracy. With the MOM2, it is possible to make measurements according to the DualGround™ method. This means that the test object will be grounded on both sides throughout the test giving a safer, faster, and easier workflow.

SELECTION GUIDE FOR MOM2		
Cat. No.	MOM2 + Clamps (BD-59092)	MOM2 + Probes (BD-59090)
Warranty (years)**	1	1

** Extended warranty available for some products



General Purpose Model (247001)

Please note: These units do not include test leads



Electrical Test Equipment Catalog

SELECTION GUIDE FOR DIGITAL LOW RESISTANCE OHMMETERS (CONTINUED)

		Cat. No																						
		DLRO100E (1004-858)	DLRO100X (1004-899)	DLRO100H (1004-939)	DLRO100EB (1004-879)	DLRO100XB (1004-919)	DLRO100HB (1004-959)	DLRO10HD + DH4C (1006-603)	DLRO10HD + KC1 (1006-604)	DLRO10HD-NLS (1006-657)	DLRO10HDX -NLS (1008-052)	DLRO10HDX + DH4C (1008-075)	DLRO10HDX + KC1 (1008-095)	DLRO10 (1006-598)	DLRO10-NLS (1006-660)	DLRO-10X (1006-600)	DLRO-10X-NLS (1006-659)	247000	247001	247002	DLRO200-US (1012-782)	DLRO200-US-NLS (1012-783)	DLRO200-115	DLRO200-115-NLS (1000-565)
Output Current	10 amp	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	100 amp	■	■	■	■	■	■														■	■	■	■
	200 amp*																				■	■	■	■
	Additional smoothing	■	■	■	■	■	■																■	■
Onboard Memory storage			■	■		■	■				■	■	■			■	■				■	■	■	■
Power Source	Rechargeable battery				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
	Line power	■	■	■	■	■	■	■	■	■	■	■	■								■	■	■	■
No Leads Set supplied		■	■	■	■	■	■			■	■				■		■	■	■	■		■		■
Duplex/Hand Spikes								■				■		■		■								
Kelvin Clips									■				■											
Current and Potential Leads																					■		■	
Warranty (years)**		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

For full details on these or any other products:



VIEW DATASHEETS

<https://bit.ly/MeggerDatasheets>

*Configurable current output: 10 A to 200 A

** Extended warranty available for some products



Electrical Test Equipment Catalog

100A KELVIN CLAMPS

new

The 100A Kelvin Clamp is designed for use with a variety of electrical test instruments[†]. Connect to a multimeter using safety banana leads and built-in banana posts, or upgrade hard-wired lead sets by removing the dust cover to expose a 100A DC stud and flying potential lead.

The expandable metal jaw provides unparalleled versatility, allowing for connection to any size test specimen. With a Limited Lifetime Warranty, this shatterproof clamp is built to last!

- 3" / 75mm Jaw Opening
- 33A Safety Banana Postsⁱ
- 100A DC continuous
- 200A DC w/duty cycleⁱⁱ
- 15kV/500mA ac
- Two Clamps = 4 Wire Kelvin
- -40°C to 40°C operating temperature
- Shatterproof plastic
- Limited Lifetime Warranty

[†] See bulleted items above

ⁱ Requires compatible hardware

ⁱⁱ 3/30 min on/off



ORDERING INFORMATION FOR 100A KELVIN CLAMPS

Item	Cat. No.
Red	100A-KC-R
Black	100A-KC-BLK
Yellow	100A-KC-Y
Blue	100A-KC-BLU
White	100A-KC-W
Green	100A-KC-G



DLRO10HD AND DLRO10HDX CATIII 300V INDUSTRIAL APPLICATION KIT

- Connect 4mm shrouded plugs to the DLRO10HD and DLRO10HDX
- Ideal for testing in industrial locations
- Maintains instruments CATIII 300V rating of instruments
- Kelvin probe and clip lead sets supplied
- Bridging lead set supplied for accurately measuring cable resistance

ORDERING INFORMATION FOR INDUSTRIAL APPLICATION KIT

Cat. No.	Description
1011-376	Industrial Application Kit

Replacement parts available upon request

Electrical Test Equipment Catalog

DLRO LEADS

Megger DLROs require test leads, two potential and two current, to make low-resistance measurements. In addition to individual current and potential lead sets, duplex leads that combine current and potential connections in one set are offered. A variety of C-clamps, Kelvin clips, fixed point, and helical spring-point leads are available in various lengths.

DUPLEX CONNECT TEST LEADS

Cat. No.	Description	Length	
1006-442	Connect Duplex Handspike lead set 3m (x2) for BT51	10 ft. (3 m)	
1006-443	Connect Duplex Handspike lead set 6m (x1) for BT51	20 ft. (6 m)	
1006-444	Duplex hand spikes	4 ft. (1.2 m)	
1006-445		8 ft. (2.5 m)	
1006-446		4 ft. (1.2 m)	
1006-456	Connect test leads with indicator light	5 ft. (1.5 m)	
1006-458		10 ft (3 m)	
1006-459		20 ft. (6 m)	
1006-452	Connect test lead without indicator light	5 ft. (1.5 m)	
1006-454		10 ft (3 m)	
1006-455		20 ft. (6 m)	
1007-023	Connect test leads for BT51	10 ft (3 m)	
1007-024		20 ft. (6 m)	
1006-460	Connect extension lead	20 ft. (6 m)	
1006-450	Duplex connect probe	Probe	
1006-449	Duplex connect twist probe	Probe	
1006-448	Concentric duplex connect probe	Probe	
1006-447	Heavy duty kelvin clip	Clip	
1006-451	Insulated connect Kelvin Clip	Clip	
1006-462	Connect kelvin clip lead set (x2)	10 ft (3 m)	
1006-461	Connect insulated kelvin clip lead set (x2)	10 ft (3 m)	



Wind Turbine Lightning Protection Test Lead Set

Specially designed for measuring resistance of lightning protection circuit between wind turbine blade tip to ground.

DUPLEX TEST LEADS

Cat. No.	Termination	Length	Current
242011-7	Helical hand spikes with spring points	7 ft. (2 m)	10 A
242011-18		18 ft. (5.5 m)	10 A
242011-30		30 ft. (9 m)	10 A
242009-18	Helical hand spikes w/ spring points and current push-button switch	18 ft. (5.5 m)	10 A
242002-7	heavy-duty, fixed-point hand spikes	7 ft. (2 m)	10 A
242002-18		18 ft. (5.5 m)	10 A
242002-30		30 ft. (9 m)	10 A
242003-7	Replaceable needle points	7 ft. (2 m)	10 A
242104-2-16	Heavy-duty C-clamps	16 ft. (5 m)	100 A
242104-2-26		26 ft. (8 m)	100 A
242004-7		7 ft. (2 m)	10 A
242004-18		18 ft. (5.5 m)	10 A
242004-30		30 ft. (9 m)	10 A
241005-7	0.5 in. (1.3 cm) Kelvin clips - Gold plated	7 ft. (2 m)	10 A
242005-7	0.5 in. (1.3 cm) Kelvin clips - Silver plated	7 ft. (2 m)	10 A
242006-7	1.5 in. (4 cm) Kelvin clips	7 ft. (2 m)	10 A
242006-18		18 ft. (5.5 m)	10 A
242006-30		30 ft. (9 m)	10 A
1008-028	Current lead with HD clips and separate potential leads with clips	16 ft. (5 m)	600 A
6220-756		33 ft. (10 m)	600 A
6220-757		49 ft. (15 m)	600 A
1008-029		16 ft. (5 m)	200 A

DLRO100 TEST LEADS

Cat. No.	Termination	Length	Current
1004-448	DLRO100 CAT IV Lead Set	16 ft. (5 m)	100 A
1004-449		33 ft. (10 m)	100 A
1004-450		49 ft. (15 m)	100 A
1005-634	DLRO100 CAT IV Kelvin Lead Set	16 ft. (5 m)	100 A
1005-635		33 ft. (10 m)	100 A
1005-636		49 ft. (15 m)	100 A
1005-555	DLRO100 Terminal adapters (x2)	N/A	N/A

INDIVIDUAL TEST LEADS

Cat. No.	Type	Termination	Length	Current
242021-7	Potential	Hand Spikes	7 ft. (2 m)	N/A
242021-18			18 ft. (5.5 m)	
242021-30			30 ft. (9 m)	
242041-7	Current	Terminal Clips	7 ft. (2 m)	10 A
242041-18			18 ft. (5.5 m)	
242041-30			30 ft. (9 m)	
242144-16	Current	Clamps	16 ft. (5 m)	100 A

WIND TURBINE LIGHTNING KITS

Cat. No.	Description	Length
1001-249	Wind Turbine Lightning Protection Lead Set, on reel	100 ft. (30 m)
1001-248		200 ft (60 m)
1000-809		300 ft (100 m)

Electrical Test Equipment Catalog

SOLAR PRODUCTS

PVM

Initially, the PVM210 may be used as an aid to select the most appropriate site for placing the solar panels. Once the installation is complete the PVM210 will be used to verify the stated short circuit

current, as marked on each panel, in conjunction with either a suitable multimeter or clampmeter.



PVM210 IRRADIANCE METER

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

The easy-to-read display and measurement hold feature allows fast, accurate readings of solar power.

The PVM210 has a 3¾ digit LCD display with a measurement range up to 1999 W/m².

In addition to W/m² measurements, a selectable BTU (British Thermal Unit) measurement range up to 634 BTU / (ft 2*h) is also featured. The unit features a data hold function that freezes the display to allow easy reading of measurements. Range selection is featured on the PVM210.

A universal camera screw thread on the rear of the instrument allows accurate positioning if required when using a camera stand.

- Optimal incident angle and positioning of solar panels
- Measurement of solar power for panel short circuit calculation
- 3-3/4 digit LCD display with 1999 W/m² range
- Single-handed use
- Pocket sized for easy carrying
- Standard camera mount fixing for accurate placement

ORDERING INFORMATION FOR PVM

Cat. No.	Description	Warranty (years)**
1002-548	PVM210 Irradiance meter; 1999 W/m ²	1

** Extended warranty available for some products



The **MIT400/2 series** has been proven to perform in the “renewable energy” industry. The MIT400/2 series has been used successfully in both wind and solar applications, from generators and cables to combiner boxes. Find pinched wires and leakage problems before they become dangerous with the Megger line of MIT400/2 series Insulation testers.

See page 8 for more details.

For full details on these or any other products:



Electrical Test Equipment Catalog

PVK

Both kits include the PVM210 irradiance meter. Additionally, two pairs of specialized solar test leads are included with the PVK units. The first pair is comprised of 4-ft leads terminated with standard 4 mm plugs and MC4-type solar panel connector.

The other pair consists of 6-in. adapter leads terminated with MC4 and MC3 solar connectors. Ratings of the leads are 19 A 1000 V.



PVK320 AND PVK330 PHOTOVOLTAIC KITS

- Choice of multimeter/clampmeter options for verifying solar panels
- Data hold allows easy measurements
- Single button operation
- Automatic on/off for prolonged battery life
- Compact instruments fit in pocket for easy carrying

The Megger PVK kits offer the photovoltaic engineer / electrician two choices of included test instruments for verifying a photovoltaic installation.

The PVK320 kit features the Megger PVM210 irradiance meter combined with the Megger AVO410 CATIV multimeter, while the PVK330 kit features the PVM210 with the DCM340 AC/DC clampmeter.

Both kits have a combined PV test lead / adapter set for MC3 and MC4 connection to solar panels. Also included is a zipped pouch for storing each kit.

The PV test leads, included with both kits, feature a set of red and black test leads with 4mm instrument plugs at one end, terminated with MC4 solar connectors at the other end.

The included adapter leads have MC4 connectors at one end with MC3 connectors at the other end. Ratings of the leads are 19A 1000V.

Both kits have a zipped pouch to store the instruments and leads.



ORDERING INFORMATION FOR PVK

Cat. No.	Description	Warranty (years)**	
1002-550	PVK320	1	
1002-551	PVK330	1	
1002-549	PV Test leads	1	

** Extended warranty available for some products



DCM1500S 1500 A SOLAR CLAMP METER

new

- Auto ranging
- AC 1000V / DC 2000V
- AC/DC 1500A capability
- Smart HOLD
- MIN/MAX
- Bluetooth connection to Megger Link app
- CAT IV 600V / CAT III 1000V Safety Standards
- PV test leads with MC4PV plugs

ORDERING INFORMATION FOR DCM1500S

Cat. No.	Description	Warranty (years)**	
1013-099	DCM1500S Solar PV Clamp meter	1	

Electrical Test Equipment Catalog

SUBSTATION TEST EQUIPMENT

Megger makes a line of test equipment specifically designed to test and maintain a variety of critical electrical apparatus found in electric utility and industrial substations. Also, these instruments are rugged, field proven, and useful in the following markets:

- Airports
- Power Plants
- Government/Military
- Universities
- Mining



TTR20-1 TRANSFORMER TURNS RATIO TESTER

The TTR20-1 is an excellent complement to the world-renowned hand-cranked TTR. It can measure the full range of transformers, even high MVA types. It measures three-phase transformers phase by phase.

The significant features of the TTR20-1 include:

- Fewer buttons and no menus make it extremely easy to use and acquire data
- No PC software needed to learn to upload data. Simply use PuTTY
- Replaceable “AA” (IEC LR6) batteries that last 12 hours or more (if using the specified batteries)
- Measures turns ratio, polarity, and excitation current
- Rugged metal connectors for use in harsh conditions

ORDERING INFORMATION FOR TTR20-1

Cat. No.	Description	Warranty (years)**	
TTR20-1	Handheld Transformer Turns Ratio Test Set	1	

** Extended warranty available for some products



MTO106 TRANSFORMER OHMMETER

The MTO106 is an easy-to-use, line-operated instrument specifically designed for field measurement of winding resistance in distribution transformers, motor/generator windings, and other inductive test objects.

The instrument is compact and lightweight making it truly portable. The rugged case is rated IP67 when closed which assures that the MTO106 will always arrive safely to the testing location, even in the harshest conditions.

Some of the features of the MTO106 include:

- Safe discharge
- Adjustable output current up to 6 amps
- High compliance voltage (up to 48V) for fast charging of winding
- Continuous/always on operation and very short start-up time
- Two channels for simultaneous testing of dual windings
- Stable current

ORDERING INFORMATION FOR MTO106

Cat. No.	Description	Warranty (years)**	
BN-19090	MTO106 with test leads	1	
BN-19000	MTO106 without test leads	1	

** Extended warranty available for some products

Electrical Test Equipment Catalog

SINGLE-PHASE, HAND-CRANK TTR

- Measures turns ratio and exciting current of windings in power, PTs, and CTs
- Used for testing single- and three-phase power and distribution transformers
- Applies 8 Vac with current up to 1 Amp



ORDERING INFORMATION FOR SINGLE-PHASE TTR			
Cat. No.	Description	Warranty (years)**	
550005B	Single-phase, hand-crank Transformer Turns Ratio Test Set	1	

** Extended warranty available for some products



MPD SCAN SET DIS

Defects in medium and high voltage systems not only require costly repairs, but also can lead to failures of entire network sections with corresponding consequences. Therefore, it is in the interest of all network operators to recognize signs of impending defects as early as possible and to be able to take appropriate countermeasures on time.

With the PD Scan, Megger offers a lightweight, robust and portable PD scanner that can quickly inspect various type of equipment for partial discharge signals.

- For fast verification of partial discharge activity in MV and HV plants
- Universal application range, thanks to wide variety of sensors
- Integrated camera and QR code scanner
- Easy to use via keypad and touchscreen
- Reporting via MeggerBook RE software

The PD Scan Set DIS comes with the PD Scan main device, Parabolic receiver, HFCT SC40 sensor, function tester, charger + USB cable, Bluetooth® headphone, transport case, USB Stick with operating manual and reporting software



ORDERING INFORMATION FOR PDSCAN			
Cat. No.	Description	Warranty (years)**	
1012889	MPD Scan Set DIS	1	

** Extended warranty available for some products

For full details on these or any other products:

VIEW DATASHEETS

<https://bit.ly/MeggerDatasheets>

Electrical Test Equipment Catalog

MULTI-METERS/CLAMP-ONS AND TESTERS



DCM310

DCM310, DCM320, DCM340 CLAMP METERS

- Resistance measurement up to 20 MΩ on DCM320; 400 Ω on DCM340
- Measure ac current up to 600 A
- Data hold feature
- Meet safety requirements of IEC 1010 CAT III 600V



DCM330 FORK METER

- Open-jaw design enables simple and fast measurements
- ac and dc voltage measurements up to 1000 V
- Resistance range up to 20 MΩ
- Continuity buzzer and diode check
- Non-contact detection of ac voltage
- CAT IV, 600 V



DCM305E

- 0.001 mA resolution
- Up to 100 A range for standard ac current measurements
- Low pass filter to aid stability of readings
- Auto, data and peak hold
- 40 mm jaw
- Analog bargraph display for trending



DPM1000 POWER CLAMP METER



- dc and ac current up to 1000 A
- True RMS measurement for greater accuracy
- Large jaw size safely assists with uninsulated conductor measurements
- 1000 VAC and 1000 VDC
- Resistance, continuity, frequency, phase rotation, capacitance, in-rush current, power factor, wattage, harmonics, diode test, temperature.
- Peak, min/max and data-hold functions



DCM1500 1500 A TRMS CLAMP METER

- dc and ac current up to 1500 A
- True RMS measurement for greater accuracy
- Large jaw size safely assists with uninsulated conductor measurements
- 750 VAC and 1000 VDC
- Resistance, continuity and frequency
- Peak, min/max and data-hold functions



Check out our **NEW** solar model, the DCM1500S. For more information, see page 27

ORDERING INFORMATION DCM SERIES

Cat. No.	Measurement Range	Warranty (years)**		Cat. No.	Measurement Range	Warranty (years)**	
DCM305E	100 A ac	1		DCM330-EN	200 A ac	1	
DCM310-EN	400 A ac	1		DCM340-EN	600 A ac/dc	1	
DCM320-EN	400 A ac	1		DCM1500	1500 ac/dc	1	
DPM1000	1000 A AC/DC	1					

** Extended warranty available for some products

Electrical Test Equipment Catalog



AVO830, AVO835 TRUE RMS MULTIMETER

- Voltage and current, with TRMS, resistance, conductance, capacitance, frequency and temperature measurement
- Choice of input impedance without changing test ranges for fast and safe detection of unintentionally coupled voltages
- Integrated non-contact live circuit detection with high and low sensitivity settings
- Reading capture tools including minimum, maximum, average, manual and auto hold, smoothing and low pass filtering
- Phase sequence detection
- CAT IV 600 V and CATII 1000 V
- Dust and weather proof to IP64

ORDERING INFORMATION FOR AVO800 SERIES

Cat. No.	Description	Warranty (years)**
AVO830	Multimeter	1
AVO835	Multimeter	1

** Extended warranty available for some products

TPT420 CATIV 1000V 2 POLE TESTER

new

- CAT IV/1000 V
- IP64 Rated
- 12 - 1000 V ac
- 12 - 1500 V dc
- Continuity test function with visual and acoustic indication
- Voltage indication with no batteries
- Single pole voltage test
- Phase rotation indication
- Integrated flashlight



ORDERING INFORMATION FOR TPT420

Cat. No.	Description	Warranty (years)**
1013-189	TPT420 CATIV 1000V 2 Pole Tester	1

** Extended warranty available for some products

MET1000 ALL-IN-ONE TRUE RMS ELECTRICAL TESTER

new

- LED and LCD display with self-test
- Detachable test probes
- ac/dc voltage to 1000 V
- 200 A ac measurement
- True RMS on ACV/ACA
- Measures voltage without batteries



ORDERING INFORMATION FOR MET1000

Cat. No.	Description	Warranty (years)**
1013-099	MET1000 All-in-one True RMS Electrical Tester	1

** Extended warranty available for some products

MPU690 PROVING UNIT

- 5 stepped nominal output voltages (50 to 690) V ac
- Automatic operation
- High output power suitable for test lamps
- Extended battery life
- Magnetic base
- Rugged case



ORDERING INFORMATION FOR MPU690

Cat. No.	Description	Warranty (years)**
1001-561	MPU690 Proving Unit	1

For full details on these or any other products:



Electrical Test Equipment Catalog

TIME DOMAIN REFLECTOMETERS

Whether locating cable faults or testing the integrity of communication, power, or control cables, TDRs available from Megger provide fast and accurate results. Models with built-in or

optional blocking filters can be used on energized cable up to a specified voltage limitation. Models without blocking filters are for de-energized cable only.

CFL535G TIME DOMAIN REFLECTOMETER



The CFL535G is a dual channel, compact Time Domain Reflectometer for locating faults on metallic cables. It has a minimum resolution of 0.1m/0.3ft and a 20km/60kft maximum range depending on velocity factor selected and cable type.

- Comprehensive dual channel capability with dual aspect display
- AUTO set up for instant use
- Ultra fast pulse for near-end fault identification
- One button press Xpert guidance to potential fault
- IP54 rating offers real life working conditions
- Designed for use on all metallic cable pairs
- Toughened and fully bonded LCD screen viewable in all light conditions
- CAT III 300 V, CAT IV 150 V



See CFL535G ordering information on page 33.



TDR2010 TIME DOMAIN REFLECTOMETER



The TDR2010 has the same features as the CFL535G with added trace tagging. The addition of the trace tagging function allows you to maintain accurate records of circuit details against every saved result.

See TDR2010 ordering information on page 33.



TDR2050 TIME DOMAIN REFLECTOMETER



The same as TDR2010 but with the addition of 600 V CAT IV rating, Step, Distance Dependant Gain (DDG), and FindEnd functions. This unit can also be used on energized circuits.

See TDR2050 ordering information on page 33.

Electrical Test Equipment Catalog



CFL510G TIME DOMAIN REFLECTOMETER



- Single trace display with dual cursor
- 2 ns fast pulse for near-end fault identification
- Trace hold with live trace overlay
- Last setting memory
- 14 hour battery life



TDR500/3



- Simple operation
- AUTO selection of gain and pulse width
- Ultra fast pulse for near end fault identification
- Trace HOLD feature
- IP54 rating offers real life working
- Designed for use on all metallic cable pairs

SELECTION GUIDE FOR TIME DOMAIN REFLECTOMETERS

Model	TDR500/3	CFL510G	CFL535G	TDR2010	TDR2050
Measurement Ranges (full scale)	30, 75, 300, 750, 3000, 7500, 15000 ft (10, 25, 100, 250, 1000, 2500, 5000 m)	30, 75, 300, 750, 3000, 7500, 15,000 ft (10, 25, 100, 250, 1000, 2500, 5000 m)	Up to 65616 ft (20000 m) in 11 steps	Up to 65616 ft (20000 m) in 11 steps	Up to 65616 ft (20000 m) in 11 steps
Fault Location Modes	1	3	5	5	5
Display	Graphic	Graphic LCD	Graphic LCD	Graphic LCD	Graphic LCD
Dual Cursors		■	■	■	■
Accuracy	±1 %	±1 %	±1 %	±1 %	±1 %
Resolution	1% of range	1% of range	1% of range	1% of range	1% of range
Gain	3 steps	3 steps	auto/manual	auto/manual	auto/manual
Velocity Factor	0.2 to 0.99	0.2 to 0.99	0.2 to 0.99	0.2 to 0.99	0.2 to 0.99
Output Impedance (Ω)	100	25, 50, 75, 100	25, 50, 75, 100, 125	25, 50, 75, 100, 125	25, 50, 75, 100, 125
Output Pulse	2 ns for near fault location	2 ns for near fault location	2 ns for near fault location	2 ns for near fault location	2 ns for near fault location
Pulse Amplitude	5 V pk to pk	5 V pk to pk	up to 20 V pk to ok	up to 20 V pk to pk	up to 20 V pk to pk
Low Battery Warning	■	■	■	■	■
Backlight	■	■	■	■	■
TX Null	■	■	■	■	■
Channels	1	1	2	2	2
Auto Shutdown	■	■	■	■	■
Result Storage	N/A	N/A	■	■	■
Download to PC	N/A	N/A	■	■	■
600V input protection					■
Rating	IP54	IP54	IP54	IP54	IP54
Trace Tagging	N/A	N/A	N/A	■	■

See included accessories on next page

** Extended warranty available for some products

Electrical Test Equipment Catalog

INCLUDED ACCESSORIES FOR TDRS					
Model	TDR500/3	CFL510G	CFL535G	TDR2010	TDR2050
Included Accessories					
Lead Set	■	■	■	■	■
Test/Carry Case	■	■	■	■	■
USB Download Lead	N/A	N/A	■	■	■
Download Software	N/A	N/A	TraceXpert	TraceXpert	TraceXpert
Batteries	■	■	■	■	■
Warranty (years)**	1	1	1	1	1

** Extended warranty available for some products

CABLE AND PIPE LOCATOR

new

EASYLOC

The Easyloc is fast and simple to operate, with features designed to avoid potentially dangerous power cables and other services as efficiently as possible. The Easyloc receiver shows the signal level received and marks the maximum with a marker.

This means operators work with both an audio signal and visual confirmation at all times. Depth measurement is possible at the push of a button, even when using the power mode, but only with Easyloc Standard.

Easyloc is suitable for water, rail, gas, power, highways, and telecommunication utilities, as well as contractors, groundworks, building, local authorities, civil engineering, streetlighting and fencing, gardening and landscaping companies.

- Make optimum preparations for your building work, quickly and reliably
- Semi-automatic sensitivity control
- Depth measurement, even without transmitter
- Compatible with other location systems
- High-performance transmitter
- Big display with easy menu structure and automatic backlight



ORDERING INFORMATION FOR EASYLOC			
Cat. No.	Description	Warranty (years)**	
890005617-5	Easyloc Standard System complete - Receiver Easyloc RX Standard, Transmitter Easyloc TX, Grounding set, Ground stake, carry bag, user manual	1	

** Extended warranty available for some products

EASYLOC OPTIONAL ACCESSORIES		
Cat. No.	Description	
810696	Sonde, 33 kHz / ø 18.5 mm	
820005314	Transmitter clamp 100 mm	
890008854	House connection set	
890004303	Grounding set (included earth stake, earth reel)	



OIL TEST SET

SEMI-AUTOMATIC OIL TEST SET

- Robust oil chamber lid
- Sturdy and protective control panel lid
- Easy, semi-automatic operation
- Suitable for all oil breakdown testing to 60 kV
- Automatic 1 minute timer for easy withstand testing

ORDERING INFORMATION SEMI-AUTOMATIC OIL TEST SET			
Cat. No.	Description	Warranty (years)**	
OTS60SX/2 (1005-272)	Semi-automatic Oil Test Set	1	
OTS60SX/2 KIT (1008-225)	OTS60SX/2 US Kit (includes vessel, mushroom and cylindrical electrodes)	1	
6320-233	Spherical-type vessel electrodes	1	
6320-234	Mushroom-type electrodes	1	
6111-356	Cylindrical-type electrodes	1	



** Extended warranty available for some products

THERMAL CAMERA



TC3231 THERMAL CAMERA

The TC3231 combines the convenience of an infrared thermometer with the visual advantage of a thermal imager, which provides a troubleshooting camera with an infrared heat map. The unit offers a professional infrared 32x31 pixels image thermometer with a 2.2 in. color TFT LCD. It covers a wide range of surface temperature measurements.

The TC3231 features a range of thermal image display color palette options and high/low user preset temperature alarms. The user can also set the background temperature.

Additionally, the TC3231 is the ideal accessory for the MIT5/10/15 kV insulation testers, MPQ1000, and MTR105.

ORDERING INFORMATION FOR TC3231			
Cat. No.	Description	Warranty (years)**	
1012-514	TC3231 Thermal Camera	1	

** Extended warranty available for some products



For full details on these or any other products:



Electrical Test Equipment Catalog

POWER QUALITY



MPQ1000

The Megger MPQ1000 Power Quality Analyzer is an advanced, highly intuitive, handheld 3-phase analyzer that delivers unmatched capability in a smart ergonomic platform. View RMS data, waveforms, demand data, phase angles, harmonics, unbalance, flicker, and more in real-time with the MPQ1000 scope mode and DVM mode. When data needs to be recorded, the MPQ1000 record verification will automatically identify the current clamps, recognize their range and verify the unit is connected properly. Simply connect it and push the record button.

The MPQ1000 can record for extended periods of time because of its massive memory. It utilizes an SD card, which makes expanding the memory as easy as installing a new SD card. The recorded data can be viewed on the MPQ1000 color VGA display or the data can be transferred to the high power Megger PQ Power Quality Analysis software via USB cable, USB stick, Ethernet or directly from the SD card.

- Automatic CT recognition
- Automatic connection verification
- On-board data analysis
- SD card and USB stick support
- 1000 V ac and 1000 V dc range
- Scope and DMM modes
- CATIV @ 600 V
- IEC61000-4-30 Class A compliant



POWER QUALITY SIMULATOR

An optional accessory for the MPQ1000 is an ideal training tool. Creates a three-phase source, 50/60 Hz and loads off of single-phase dc adapter.

ORDERING INFORMATION FOR MPQ1000

Cat. No.	Description	Warranty (years)**
MPQ1000 - Basic	MPQ1000 Basic Kit	1
MPQ1000 - Silver	MPQ1000 Silver Kit	1
MPQ1000 - Silver Plus	MPQ1000 Silver Plus Kit	1
MPQ1000 - Gold	MPQ1000 Gold Kit	1
MPQ1000 - Gold Plus	MPQ1000 Gold Plus Kit	1
MPQ1000 - Platinum	MPQ1000 Platinum Kit	1
MPQ1000 - Platinum Plus	MPQ1000 Platinum Plus Kit	1
MPQ-SIM-01	PQ Simulator	1

** Extended warranty available for some products

Electrical Test Equipment Catalog

MPQ1000 BASIC KIT

Includes MPQ1000 analyzer, voltage leads, 32GB SD card, USB cable, ethernet cable, universal power adapter, soft-sided carry bag plus fuse adapters and hanging strap.

Does not include current clamps..

See ordering information on page 36.



MPQ1000 Basic Kit - C/N MPQ1000-BASIC

MPQ1000 SILVER KITS

Includes MPQ1000 analyzer, voltage leads, 32GB SD card, USB cable, ethernet cable, universal power adapter, soft-sided carry bag, plus hanging strap, voltage lead plunger clips, and 3 MCCV6000-18 (four range flex 18 cm ID) CTs

Silver Plus kit: The same as the Silver kit above except with 4 MCCV6000-18 CTs.

See ordering information on page 36.



MPQ1000 Silver Kit - C/N MPQ1000-S-KIT



MPQ1000 Silver Plus Kit - C/N MPQ1000-S-KIT-PLUS

MPQ1000 GOLD KITS

Gold kit: MPQ1000 analyzer, voltage leads, 32GB SD card, USB cable, ethernet cable, universal power adapter, soft-sided carry bag, plus hanging strap, voltage lead plunger clips, and 3 MCCV6000-27 (four range flex 27 cm ID) CTs

Gold Plus kit: The same as the Gold kit above except with 4 MCCV6000-27 CTs.

See ordering information on page 36.



MPQ1000 Gold Kit - C/N MPQ1000-G-KIT



MPQ1000 Gold Plus Kit - C/N MPQ1000-G-KIT-PLUS

MPQ1000 PLATINUM KITS

Includes MPQ1000 analyzer, voltage leads, 32GB SD card, USB cable, ethernet cable, universal power adapter, soft-sided carry bag, plus hanging strap, voltage lead plunger clips, and 3 MCCV6000-37 (four range flex 37 cm ID) CTs

Platinum Plus kit: The same as the Platinum kit above except with 4 MCCV6000-37 CTs.

See ordering information on page 36.



MPQ1000 Platinum Kit - C/N MPQ1000-P-KIT



MPQ1000 Platinum Plus Kit - C/N MPQ1000-P-KIT-PLUS

Electrical Test Equipment Catalog

BATTERY TEST EQUIPMENT

Megger has the right equipment for your battery maintenance requirements regardless of whether you are testing flooded lead-acid, VRLA, or Ni-Cd batteries. The BITE® products are so easy to use that the test can be performed quickly by one person. All BITE instruments have the ability to download to a PC for database use and further data analysis.

BITE3

The BITE3 determines the health of lead-acid cells up to 2000 Ah by taking measurements of the most important battery parameters. It measures cell impedance, cell voltage, intercell connection resistance, and float and ripple currents. It also measures the harmonic content of the ripple current with its built-in spectrum analyzer.

- The BITE3 comes complete with:**
- Line charger
 - Power DB lite software
 - RS232 modem cable
 - Dual point test leads (7 ft)
 - Spare test lead tips
 - Canvas carrying case

The BITE3, combined with Power DB, is extremely useful in determining the health of batteries and to plan their replacements in an orderly, non-emergent manner. The BITE3 and Power DB are the most powerful battery management system available today.

**Optional accessory DLRO10LPU also available enables the BITE3 to be powered by 120 Vac. See page 21.*



ORDERING INFORMATION FOR BITE3

Cat. No.	Description	Warranty (years)**	
BITE3	Battery Impedance Test Equipment	1	

** Extended warranty available for some products

BITE2 AND BITE2P

The BITE2 and BITE2P determine the condition of lead-acid and nickel-cadmium cells up to 7000 Ah such as in telco, UPS, substation, and many more.

The BITE2 is compact and is ideal for service companies and for those using laptops to interpret data on-site. Impedance measurements, along with other data such as ambient and pilot cell temperatures and ac ripple current, assist in determining the overall condition of battery systems.

The BITE2P has a built-in printer to review data, find weak cells, and leave a hard copy record at the site.

ORDERING INFORMATION FOR BITE2 AND BITE2P

Cat. No.	Description	Warranty (years)**	
BITE2	Battery Impedance Test Equipment	1	
BITE2P	Battery Impedance Test Equipment with built-in printer	1	

** Extended warranty available for some products



Electrical Test Equipment Catalog

PORTABLE APPLIANCE TESTERS

Implementing a regular inspection program that includes PAT testing of electrical equipment and appliances will help protect personnel from shock hazards, facilities from electrically induced fires and businesses from litigation. For

businesses that manufacture and ship electrical products to the European Union, PAT testing at the factory will ensure that products shipped will pass import testing and not become a costly problem.

PAT450



The PAT450 is the ideal instrument for companies who engage in portable appliance testing and have a requirement to customize and adapt testing routines. Because the PAT450 conforms to the latest European regulations and standards, it enables US companies shipping electrical products internationally to ensure that their export products will pass import testing.

The PAT450 can perform earth bond continuity tests; 250V and 500V insulation tests, and a touch current test. Others include a differential leakage test; a substitute/alternative leakage test; a functional load test; and a hi-pot/flash test. The PAT450 also tests extension and power cords.

- 10,000-record on-board memory
- Large 5.7 in. ¼ VGA backlit full color screen
- 200 mA; 10 A and 25 A bond test with high duty cycle
- Selectable PASS/FAIL limits
- Works with standard barcode scanners



ORDERING INFORMATION FOR PAT450

Cat. No.	Description	Warranty (years)**
1000-956 (PAT450-US)	Portable Appliance Tester	1

** Extended warranty available for some products



ORDERING INFORMATION FOR PAT320

Cat. No.	Description	Warranty (years)**
1001-366 (PAT320-US)	Portable Appliance Tester	1

** Extended warranty available for some products

PAT320



The PAT320 is a full-featured portable bench-top appliance tester designed for customers who do not need the complexity of a fully configurable database of clients and results within the tester. It offers a complete range of functions to allow automatic or manual testing of the widest range of electrical equipment. It is ideal 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.

- Simple pushbutton operation
- Pass/Fail indicator
- Full-color display
- Supports all regulatory test requirements (Class I and Class II equipment)

Electrical Test Equipment Catalog

SPECIALITY TESTING



Cat. 230415 shown

HIGH-POT TESTERS

- Tests all items at end of a production run for UL safety conformance
- Ground continuity check of 3-wire devices with high voltage interlock
- Leakage current adjustable on front panel from 0.3 to 12.3 mA
- One-second or continuous testing
- Automatic failure shutdown

ORDERING INFORMATION FOR HIGH-POT TESTERS

Cat. No.	Description	Warranty (years)**
230315	AC High-pot Tester, 0 to 3 kV ac	1
230415	AC High-pot Tester, 0 to 4 kV ac	1
230425	AC/DC High-pot Tester, 0 to 4 kV ac, 0 to 5 kV dc	1

** Extended warranty available for some products



CABLE HEIGHT METER

- Ultrasonic height measurement of overhead wires and cables
- Inherently safe
- No physical connection to cables under test
- Noise and stray signal rejection
- Measures the height of up to 6 overhead cables
- 3 ranges available

ORDERING INFORMATION FOR CABLE HEIGHT METERS

Cat. No.	Description	Warranty (years)**
CHM2000	Telecom Cable Height Meter, 35 ft (11 m)	1
659600	Power Cable Height Meter, 50 ft (15 m)	1
659600E	Power Cable Height Meter, 75 ft (23 m)	1

** Extended warranty available for some products



Electrical Test Equipment Catalog

THREE-PHASE SEQUENCE

The three-phase sequence equipment consists of a range of power line testing products including:

- Cable phasing meters to measure voltage and determine phase rotation of underground distribution systems.
- Phase sequence indicators for identifying the phase sequence and any faulty or open phase of energized lines.



Cat. No. 830220-1

CABLE PHASING METER

- Measures up to 30 kV
- Designed to phase out cables
- Battery operated
- Measures capacitance of test point if system voltage is known
- Works on capacitance test points incorporated into elbow connectors

PHASE SEQUENCE TEST SETS

Model PSI-700

- Identifies faulty phase
- Indicates A, B or C phase
- No moving parts, batteries or binding posts and requires no power source
- Housed in a rugged, insulated enclosure

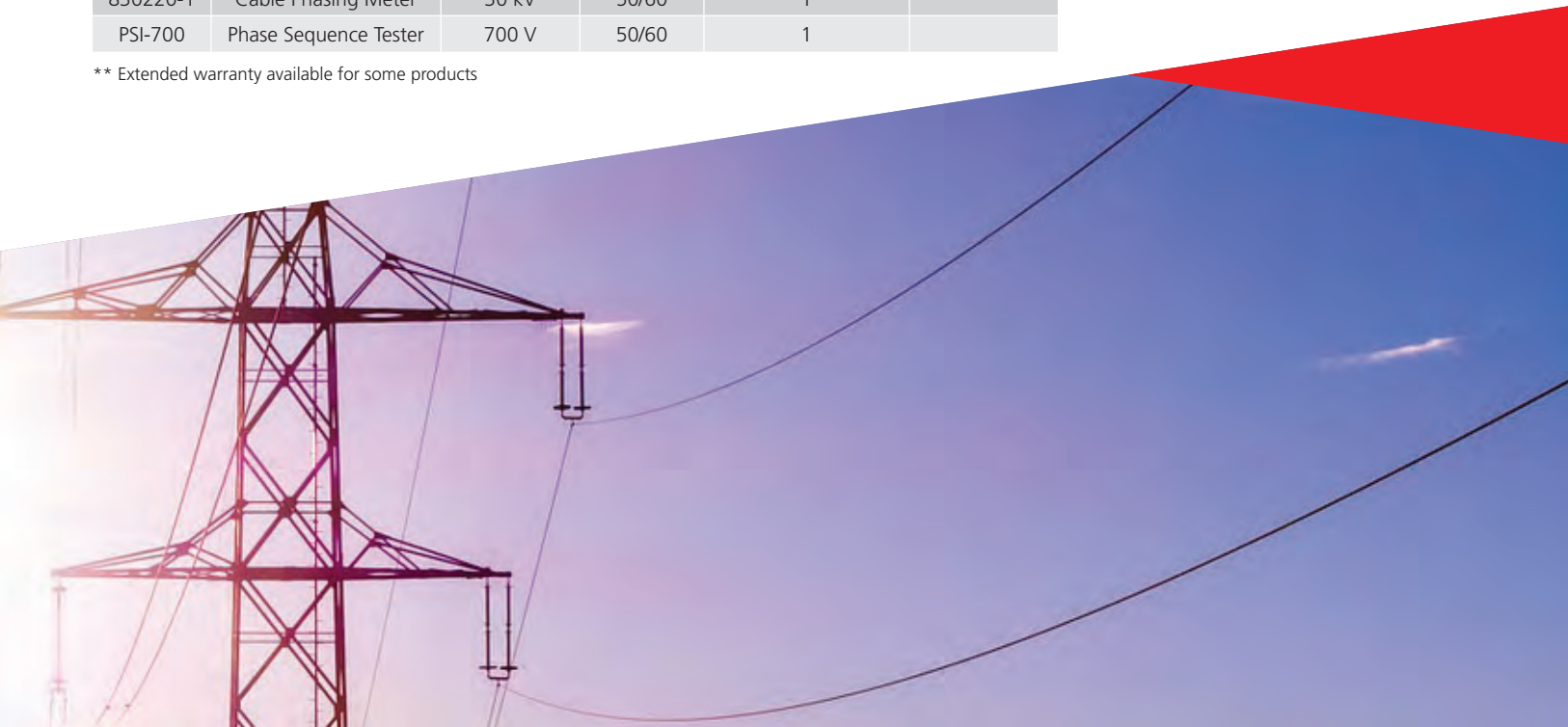


Cat. No. PSI-700

SELECTION GUIDE FOR THREE-PHASE SEQUENCE EQUIPMENT

Cat. No.	Description	Max Voltage	Frequency	Warranty (years)**
830220-1	Cable Phasing Meter	30 kV	50/60	1
PSI-700	Phase Sequence Tester	700 V	50/60	1

** Extended warranty available for some products



Electrical Test Equipment Catalog

MOTOR TEST EQUIPMENT



Cat. No. 560060

MOTOR & PHASE ROTATION TEST SETS

- Determine the rotation direction of single and three-phase motors before connection to the line
- Identify true phase sequence of energized 50/60 Hz power lines up to 600 V
- Supplied with easily connected alligator clip leads
- Determine polarity of power and instrument transformers

MTR105 **new**

The MTR105 is a state-of-the-art motor tester, equipped with Megger's full suite of insulation resistance tests, packaged in a robust and versatile handheld instrument. With all of the reliability and traditional features of Megger's original insulation testers, the MTR105 goes beyond previous testing abilities, incorporating DLRO four wire Kelvin low resistance, inductance, and capacitance tests. Additionally, this new instrument incorporates temperature correction for insulation resistance, as well as motor direction of rotation, plus supply phase rotation tests. Packaged in an over-molded case, the MTR105 is protected in the most rugged conditions, achieving an IP54 weatherproof rating.

- Full color graphic display
- 3 Phase insulation resistance
- Temperature correction for insulation resistance
- Guard terminal
- DLRO four wire Kelvin
- Continuity and diode test
- Motor direction of rotation
- Capacitance and inductance
- CAT III 600 V up to 3000 m
- Environmental protection to IP54



SELECTION GUIDE FOR MOTOR TEST EQUIPMENT					
Cat. No.	Description	Max Voltage	Frequency	Warranty (years)**	
560060	Motor and Phase Rotation Tester	600 V	50/60	1	
560400	Motor and Phase Rotation Tester	600 V	25/50/60/400	1	
1010-361	MTR105 Rotating Machine Tester			1	

** Extended warranty available for some products



SAFETY TEST EQUIPMENT

VOLTAGE DETECTORS AND PHASING TESTER

DETEX® VOLTAGE DETECTORS

- Verify the absence of voltage on a line or terminal of any grounded electrical system
- Flashing LEDs and piercing tone warn of phase-to-ground voltages
- Self-test ensures detector is working properly
- Continuous monitoring with no ON/OFF switch
- Fits most standard hot sticks
- All ratings per ANSI C84.1, with conformance to IEC 61243-1 guidelines for capacitive high-voltage test instruments
- Telescopic 48-in. pole retracts to 34-in. for easy storage when not in use

See ordering information on page 44.



Cat. No. 514360-X
Voltage Detector



Cat. No. 514440-2
Voltage Detector



Cat. No. 514242
Transmission Line Voltage Detector

DETEX® PHASING TESTER

- Ideal for use on grounded and ungrounded ac systems to check high-voltage fuses
- Cat. No. 510836-1 provides bright LED indication for easy visibility where lighting conditions are poor
- Equipped with two fixed-length poles connected by flexible, insulated cable
- High voltage unit is fitted with universal spline-fitting for attachment to a standard hot stick

See ordering information on page 44.



Cat. No. 510836-1
LED Phasing Tester

DETEX® SINGLE-POLE PHASE COMPARATOR

- Performs phase comparison with a single pole
- No connecting cable to limit distance and mobility
- Memorizes reference phase, then visual and audible indicators signal whether additional phases are in phase or in opposition
- Unit is fitted with universal spline-fitting for attachment to a standard hot stick
- Battery operated
- Complies with IEC 61481

NOTE: This unit is not a voltage detector.

See ordering information on page 44.



Cat. No. 510900
Single-pole Phase
Comparator

Electrical Test Equipment Catalog

PIEZO VERIFIERS

- Designed for use with both single pole and two-pole detectors
- Consist of a Piezo generator of very small dimensions enclosed in a case of insulating material
- Operated by a handle of molded material
- A high-voltage model (cat. no. 510006) provides selectable outputs of 10, 20, and 30 kV



ORDERING INFORMATION FOR PIEZO VERIFIERS

Cat. No.	Description	Warranty (years)**
510005	Piezo Verifier, generates 1800 V	1
510006	Piezo Verifier, generates 10, 20, 30 kV	1

** Extended warranty available for some products

PNEUMATIC GLOVE TESTER

- Rugged molded air pump designed to test all types of rubber gloves, with maximum convenience and minimum effort
- Built-in check valve retains pressure within the glove
- Two fabric covered elastic sealing rings are provided



ORDERING INFORMATION FOR PNEUMATIC GLOVE TESTER

Cat. No.	Description	Warranty (years)**
512117	Pneumatic Glove Tester	1

** Extended warranty available for some products

ORDERING INFORMATION FOR VOLTAGE DETECTORS

Cat. No.	Model	Operating Voltage Range	Mechanical Style	Min. Voltage (Phase to Ground)	Nominal System Voltage Range, 50/60 (phase to phase)	Weight	Warranty**
514360-5	Electronic, with red LED and audible indication	4 to 14.5 kV	Spline fitted for attachment to a universal hot line pole	2.3 kV	4.16 to 13.8 kV	1.1 lb (0.5 kg)	1
514360-6		11.7 to 36.2 kV		6.8 kV	12 to 34.5 kV		1
514360-7		24.3 to 72.5 kV		14 kV	24.94 to 69 kV		1
514360-8		2.3 to 7.2 kV	48-in. telescopic pole	1.2 kV	2.4 to 6.9 kV	2.2 lb (1 kg)	1
514242-1		67 to 235 kV	Spline fitted for attachment to a universal hot line pole	38 kV	69 to 230 kV	1.5 lb (0.67 kg)	1
514242-2		200 to 550 kV		115 kV	230 to 500 kV		1
514440-2	White LED	3.6 to 36.5 kV	48-in. telescopic pole	2.1 kV	4.16 to 34.5 kV	2.1 lb (0.95 kg)	1

ORDERING INFORMATION FOR PHASING METERS

Cat. No.	Model	Nominal System Voltage Range, 50/60 Hz (phase to phase)	kV Indicator Markings*	Mechanical Style	Pole Length	Cable Length	Warranty**
510836-1*	LED	4.16 to 34.5 kV	0, 4.2, 7.2, 13, 25, 35	Two fixed length poles with hand guards	43 in. (1092 mm)	54 in. (1372 mm)	1
510900		10 to 30 kV, 50/60 Hz	None	Spline fitted for attachment to a universal hot line pole	35 in. (880 mm)	N/A	1

** Extended warranty available for some products

Electrical Test Equipment Catalog

VF2 AC VOLTAGE DETECTOR

- Non-contact detection of ac voltage
- Automatic audible warning buzzer
- Also doubles as a flashlight
- 100-600 V ac 50/60 Hz



ORDERING INFORMATION FOR VF2

Cat. No.	Description	Warranty (years)**	
1000-213	VF2 AC Voltage Detector	1	

** Extended warranty available for some products

For full details on these or any other products:



Electrical Test Equipment Catalog

TEST AND MEASUREMENT SOFTWARE

POWER DB

PowerDB Lite software is used for managing instrument test results and archiving test forms that can be used for generating formal test reports. This cost-effective solution for test data form creation is supplied free of charge with selected Megger instruments.

For more information on PowerDB, log onto our website — us.megger.com

PowerDB Lite software can be used with:

- **Insulation testers**
- **DLROs**
- **Ground Testers**
- **MTR motor tester**
- **Battery testers**

For full details on these or any other products:



Electrical Test Equipment Catalog

CROSS-REFERENCE GUIDE

Cat. No.	Description	Page	Cat. No.	Description	Page
210170.....	Major Megger.....	11	DLRO10HD.....	DLRO, 10 Amp.....	19
212159.....	Major Megger.....	11	DLRO10HDX.....	DLRO, 10 Amp.....	19
212359.....	Major Megger.....	11	DLRO100.....	DLRO, 100 Amp.....	20
230315.....	AC High-pot Tester.....	40	DLRO2.....	DLRO, 2 Amp.....	18
230415.....	AC High-pot Tester.....	40	DLRO200.....	DLRO, 200 Amp.....	21
230425.....	AC/DC High-pot Tester.....	40	DPM1000.....	Power Clamp Meter.....	30
247000 Series.....	General Purpose DLROs.....	22	EASYLOC.....	Cable and Pipe Locator.....	34
510005.....	Piezo Verifier.....	44	MET1000.....	True RMS Electrical Tester.....	31
510006.....	Piezo Verifier.....	44	MFT70.....	Multifunction Tester.....	17
510836-1.....	Detex Phasing Tester.....	43	MIT1025.....	10-kV Insulation Tester.....	5
510900.....	Single-pole Phase Comparator.....	43	MIT1525.....	10-kV Insulation Tester.....	4
512117.....	Pneumatic Glove Tester.....	44	MIT200 Series.....	1-kV Insulation Testers.....	9
514242-X.....	Detex Voltage Detectors.....	43	MIT2500.....	2.5-kV Insulation Tester.....	7
514360-X.....	Detex Voltage Detectors.....	43	MIT300 Series.....	1-kV Insulation Testers.....	9
514440-2.....	Detex Voltage Detector.....	43	MIT400/2 Series.....	1-kV Insulation Testers.....	8
550005B.....	Single Phase TTR.....	29	MIT515.....	5-kV Insulation Tester.....	5
560060.....	Motor and Phase Rotation Tester.....	42	MIT525.....	5-kV Insulation Tester.....	5
560400.....	Motor and Phase Rotation Tester.....	42	MJ15.....	5-kV Insulation Tester.....	11
659600.....	Power Cable Height Meter.....	40	MOM2.....	Handheld Micro-ohmmeter.....	22
830220-1.....	Cable Phasing Meter.....	41	MPDSCAN.....	Portable PD scanner.....	29
AVO830.....	TRMS Multimeter.....	31	MPQ1000.....	Power Quality Analyzer.....	36
AVO835.....	TRMS Multimeter.....	31	MPQ-SIM-01.....	Power Quality Simulator.....	36
BITE 2I2P.....	Battery Impedance Tester.....	38	MPU690.....	Proving Unit.....	31
BITE 3.....	Battery Impedance Tester.....	38	MTO106.....	Transformer Ohmmeter.....	28
BM15.....	5-kV Insulation Tester.....	11	MTR105.....	Rotating Motor Tester.....	42
BM5200.....	5-kV Insulation Tester.....	11	OTS60SX2.....	Oil Test Set.....	35
CFL510G.....	Time Domain Reflectometer.....	33	PAT320.....	Portable Appliance Tester.....	39
CFL535G.....	Time Domain Reflectometer.....	32	PAT450.....	Portable Appliance Tester.....	39
CHM2000.....	Telecom Cable Height Meter.....	40	PVK320/330.....	Photovoltaic Kits.....	27
DCM Series.....	Digital Clamp Meters.....	30	PVM210.....	Irradiance Meter.....	26
DCM1500.....	TRMS Clampmeter.....	30	PSI-700.....	Phase Sequence indicator.....	41
DCM1500S.....	Solar TRMS Clampmeter.....	27	TC3231.....	Thermal Camera.....	35
DCM305E.....	AC Leakage Clampmeter.....	30	TDR500/3.....	Time Domain Reflectometer.....	33
DCM330.....	Forkmeter.....	30	TDR2010.....	Time Domain Reflectometer.....	32
DET2I3.....	Ground Tester.....	12	TDR2050.....	Time Domain Reflectometer.....	32
DET14C.....	Clamp-on Ground Tester.....	16	TPT420.....	2 Pole Tester.....	31
DET24C.....	Clamp-on Ground Tester.....	16	TTR20-1.....	Handheld TTR.....	28
DET3 Series.....	Earth/Ground Resistance Tester.....	13	VF2.....	AC Voltage Detector.....	45
DET4T2 Series.....	Earth/Ground Resistance Tester.....	14			
DLRO10/10X.....	DLRO, 10 Amp.....	19			



Megger makes high quality instruments for the following electrical testing applications:

- Insulation Testing
- Ground Testing
- Relay Testing
- Oil Testing
- Circuit Breaker Testing
- Power Quality Analysis
- Low Resistance Testing
- Battery Testing
- Watthour Meter Testing
- Transformer Testing
- Cable Fault Locating
- Power Factor Testing
- Hi Pot Testing

Megger manufactures electrical test and maintenance instruments for electrical power, process manufacturing, building wiring, engineering services, and communications.

Valley Forge Corporate Center
2621 Van Buren Avenue
Norristown, PA 19403-2329
Phone: 866-254-0962
Phone: 610-676-8500
Fax: 610-676-8610
us.megger.com



MEG-ASD_2021

