

# Megger Electrical Test Instruments Catalog



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# Megger®

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# Megger 1-kV Insulation Testers...

- ... Consist of a range of instruments for varying needs and budgets
- ... Provide end users with more testing capability
- ... Offer a rock solid design, making these instruments the best value proposition on the market today

Look inside for information on these innovative insulation testers



- MIT400 Series conform to IEC1010-1, CAT IV 600 V rating, offer greater functionality with simplified operation
- MIT300 Series provides an instrument for all levels of testing
- MIT200 Series is economical, rugged and easy to use

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Use this handy cross-reference guide to determine the most appropriate products for your targeted markets.

Markets	Products	Insulation Testers		Ground Testers	Multimeters	TTRs	DLROs	Battery Testers	TDRs	SCT
		5/10 kVs	1 kVs							
		Pages 2-5	Pages 6-10	Pages 12-17	Page 22	Page 27	Pages 18-20	Pages 28-29	Page 24	Page 26
	Airports	■	■	■	■	■	■	■	■	
	CATV		■	■					■	
	Commercial Building		■	■	■				■	
	Datacommunications									■
	Electric Utility/ Industrial Substations	■	■	■	■	■	■	■	■	
	Government/Military	■	■	■	■	■	■	■	■	
	Manufacturing	■	■		■			■	■	
	Mining	■	■	■	■	■				
	Petrochemical	■	■	■	■		■	■	■	
	Ports	■	■		■		■	■		
	Railroads	■	■	■			■	■		
	Rapid Transit	■	■	■			■	■		
	Telecommunications (Cellular, POTs, etc.)		■	■	■		■	■	■	
	Universities	■	■	■	■	■	■	■	■	
	Water/Waste Treatment		■	■	■		■	■		
	Wind/Renewable Energy	■	■	■	■		■			



# 5/10-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 — 5 kV — the MIT510/2 and MIT520/2 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, the MIT1020/2.

PowerDB Lite, a unique software program, is included with the Megger MIT520/2 and MIT1020/2 units. PowerDB Lite offers an easy-to-use interface for products to document results. You can easily run tests, retrieve data, annotate results and print complete test forms.

See Page 35 for more information on this powerful software!



Megger 5- and 10-kV insulation testers are used in a number of markets such as:

- Airports
- Electric Utility
- Industrial Substations
- Government/Military
- Manufacturing
- Mining
- Petrochemical
- Ports
- Railroads/Rapid Transit
- Universities
- Wind/Renewable Energy

**CATIV 600 V  
Safety Rating —  
an Industry Best!**

## MIT510/2 and MIT520/2

The MIT510/2 and MIT520/2 are advanced 5-kV diagnostic insulation testers with an expanded measurement range.

The MIT510/2 is a basic function 5-kV model with enhanced capabilities:

- Dual operation from both rechargeable batteries and line supply affords maximum reliability and insurance against human error when recharging is overlooked.
- Measurement range has been expanded to 15 Tera-ohm, replacing the ambiguous “infinity” reading with an actual number that can be used for predictive/preventive trending on the highest quality insulation.
- Test voltages are 250, 500, 1000, 2500 and 5 kV
- Capacitance is measured from 10 nF to 50  $\mu$ F, contributing an additional valuable piece of analytical information.
- Testing is inhibited above 50 V of external voltage for redundant safety.



# 5/10-KV INSULATION TEST EQUIPMENT

## MIT1020/2

Insulation testing as part of a predictive/preventive electrical maintenance program is becoming increasingly rigorous and demanding. In recognition of the critical significance of such demands, the IEEE revised their motor testing standard to incorporate new considerations that meet the challenges of modern equipment and operations.

In response, Megger expanded our line of insulation testers to offer the MIT1020/2, a 10 kV model dedicated to the provisions of the revised standard. With this one tester, 100% IEEE compliance can be attained for every applicable motor in existence.

Added to the familiar features and functions, the new MIT1020/2 offers:

- Increased measurement range to 35 Tera-ohms, in order to provide trending values for the best of insulating materials and highest capital equipment.
- Expanded test voltage range from 50 V to 10 kV, in 10 V increments to 1 kV and 25 V increments above 1 kV.
- Additional automated standardized tests to include Step Voltage, PI, Dielectric Absorption Ratio and Dielectric Discharge tests.
- Capability to measure capacitance of test item from 10 nF to 50  $\mu$ F, providing the operator with an additional valuable diagnostic tool.
- RS232 and USB download of results. (Cables included.)
- 250, 500, 1000, 2500, 5 kV and 10 kV preprogrammed test voltages.

**Improved Diagnostic Measurement —**  
All 3 units feature an industry best guard terminal performance

The MIT1020/2, shown above, and the MIT520/2, shown below, come with PowerDB Lite

**The MIT520/2 adds expanded capabilities** to the MIT510/2 to afford the skilled and experienced operator more flexibility in analyzing the condition of capital equipment.

- Test voltage can be set in any 10 V increment from 50 V to 1 kV, and above 1 kV in 25 V increments to 5 kV.
- Capable of downloading test results from its RS232 or USB ports. (Cables included.)
- Five different industry-standard tests can be programmed and run automatically.



# 5/10-KV INSULATION TEST EQUIPMENT

## Selection Guide for MIT510/2, MIT520/2 and MIT1020/2

		Model Number Cat. Number	MIT510/2 1000-372	MIT520/2 1000-376	MIT1020/2 1000-380
<b>Display</b>	Analog/Digital		■	■	■
<b>Power Supply</b>	Line power		■	■	■
	Rechargeable		■	■	■
<b>Test Voltage</b>	10.0 kV				■
	5.0 kV		■	■	■
	2.5 kV		■	■	■
	1.0 kV		■	■	■
	500 V		■	■	■
	250 V		■	■	■
	10 V steps 50 V to 1 kV, 25 V steps 1 kV to max test voltage			■	■
<b>Measurements</b>	Max reading		15 TΩ	15 TΩ	35 TΩ
	Min reading		10 kΩ	10 kΩ	10 kΩ
	Voltage		■	■	■
	Capacitance and time constant		■	■	■
	Leakage current		■	■	■
<b>Test Types</b>	Auto IR		■	■	■
	Polarization index			■	■
	Step voltage			■	■
	Dielectric discharge			■	■
	Dielectric absorption ratio			■	■
<b>Other Features</b>	CAT IV 600 V safety rating		■	■	■
	Timer control			■	■
	Timer display		■	■	■
	3mA test currents		■	■	■
	USB output (cable included)			■	■
	RS232 output (cable included)			■	■
	Calibration certificate included		■	■	■
	IP65 rating		■	■	■
	Alarm limit mode			■	
	Compatible with Megger download software			■	■
	Guard terminal performance		2% error guarding 500 kΩ leakage with a 100 MΩ load		
<b>List Price USD</b>			\$3,330.00	\$4,335.00	\$5,240.00

### What is the IEEE 43-2000?

Following is a brief summary of the highlights of Standard 43-2000, the “IEEE Recommended Practice for Testing Insulation Resistance of Rotating Machinery.”

- Test voltages up to 10 kV are recommended for windings rated greater than 12 kV.
- Both the insulation resistance and the polarization index test are recommended.
- Test results should be compared to historical values to identify changes.
- In lieu of historical records, minimum acceptable values (based on the type of equipment) for both tests are indicated.
- Depending on the machine rating, the readings for one or both tests should exceed the minimum acceptable values.
- If the readings are below the minimum acceptable values, the winding is not recommended for an over-voltage test or for operation.



# 5/10-KV INSULATION TEST EQUIPMENT

## 5-kV and 10-kV Test Leads

Megger offers a range of lead sets and clips of various sizes and electrical characteristics for use with MIT510/2, MIT520/2 and MIT1020/2 insulation resistance testers, enabling the user to choose the most applicable lead set for the work in hand. In all cases it is the responsibility of the operator to use safe working practices and verify that the system is safe before connection. Even isolated systems may exhibit significant capacitance which will become highly charged during the application of the insulation test. This charge can be lethal and connections, including the leads and clips, should never be touched during the test.

Please note the Compact Test Clips (210968, 8101-182 and 8101-183) can be used with MJ15 and BM15 as well as the MIT510/2, MIT520/2 and MIT1020/2.

### Large Test Clips

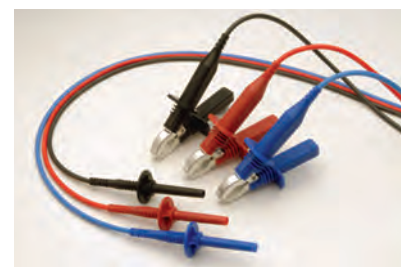
These clips are designed for clamping on larger diameter test pieces. The insulation is designed only to protect the user from the output of Megger 5-kV and 10-kV insulation resistance testers and systems below 1 kV to the category rating of 1000 V ac. The clips

**cannot** in any circumstance be relied on to protect the user from live systems above 1 kV ac.



### Medium Test Clips

These clips are designed for clamping on larger diameter test pieces but where space is at a premium. The insulation is designed only to protect the user from the output of Megger 5-kV and 10-kV (set below 6 kV) insulation resistance testers. The clips **cannot** in any circumstance be relied on to protect the user from live ac systems.



### Compact Test Clips

These clips are designed for clamping on test pieces where access is limited. There is no insulation on these clips. Extreme care **must** be taken to avoid electric shock when connecting or disconnecting due to the bare metallic clips.



### Control Circuit Test Set

These clips are designed for testing low voltage circuits with test voltages up to 1 kV. The insulation is designed only to protect the user from the output of Megger 5-kV and 10-kV insulation resistance testers set to a maximum output voltage of 1 kV. **Do not** use this lead set at voltages above 1 kV.



## Selection Guide for 5/10-kV Test Leads

Cat. No.	Description	Dimensions (Closed)	Length	Jaw Opening	Number in Set	Insulation Rating		CAT Rating	List Price USD
						Basic	Double		
6220-811	Large Test Clip	8.7 x 5.2 in. (220 x 134 mm)	10 ft (3 m)	1.3 in. (34 mm)	3	10 kV dc	5 kV dc	1000 V ac CAT IV	\$163.00
6220-820	Medium Test Clip	5.4 x 2.9 in. (139 x 73 mm)	10 ft (3 m)	1.3 in. (34 mm)	3	6 kV dc	3 kV dc	1000 V ac CAT V	\$158.00
8101-181	Compact Test Clip	2.2 x 1 in. (58 x 25 mm)	10 ft (3 m)	0.7 in. (18 mm)	3	None	None	N/A	\$230.00
8101-182	Compact Test Clip	2.2 x 1 in. (58 x 25 mm)	25 ft (8 m)	0.7 in. (18 mm)	3	None	None	N/A	\$325.00
8101-183	Compact Test Clip	2.2 x 1 in. (58 x 25 mm)	50 ft (15 m)	0.7 in. (18 mm)	3	None	None	N/A	\$375.00
6220-822	Control Circuit Test Set	2.2 x 1 in. (58 x 25 mm)	10 ft (3 m)	0.8 in. (20 mm)	2	N/A	1 kV dc Clip or Prod	N/A	\$128.00

# 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 100 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 Series — designed to meet the varying needs and budgets of all types of customers.

Megger 1-kV insulation testers are very useful in the following markets:

- Airports
- CATV
- Commercial Building
- Electric Utility/  
Industrial Substations
- ESD Testing
- Government/Military
- Manufacturing
- Mining
- Petrochemical
- Ports
- Railroads/Rapid Transit
- Telecommunications  
(Cellular, POTs, etc.)
- Universities
- Water/Waste Treatment
- Wind/Renewable Energy

## MIT400 Series

- Conform to IEC1010-1, CAT IV 600 V rating.
- Choice of 4 models for commercial and plant applications: MIT Models 400, 410, 420 and 430.
- Choice of 5 models for telecom/CATV applications: MIT Models 410-TC, 430-TC, 480, 481 and 485.
- A “Special Applications” model, MIT40X, offers a variable insulation test voltage from 10 V to 100 V applications in 1 V steps.
- The MIT410-TC and MIT430-TC are designed specifically for use within the telecommunications industry. Unique features include a soft canvas carrying bag with shoulder strap and rugged snap hook to attach to a tool belt, and a “bed of nails” test lead set.
- The MIT430, MIT430-TC and MIT485 are compatible with Megger Download Software (included) allowing further analysis and storage data.
- The MIT415 is the ideal instrument for ESD testing and maintenance.

The MIT400 Series of insulation testers meet the most stringent requirements for installation, maintenance, service and repair in the electrical, power and telecommunications industries. The instruments feature Megger’s patented dual digital and analog arc displays showing both measurement result and the actual test voltage being delivered simultaneously.

The units include an exceptional insulation resistance measurement range that extends from 20 Gigohms to 200 Gigohms, with the option to display the insulation test voltage or leakage current on the secondary display. Measurement of cable distance by capacitance is featured on two of the units, providing a convenient cable length test.

A 200 mA continuity measurement is available with a 0.01-ohm resolution for fast accurate cable/wire resistance measurement. This can be set to 20 mA where conformity to electrical testing regulations is not required, extending battery life.

TRMS voltage measurement allows accurate measurement on noisy lines providing a wide range of measurement applications.





# 1-KV INSULATION TEST EQUIPMENT



The MIT430 offers result storage, recall and Bluetooth downloading

The MIT410-TC shown with its soft canvas carrying bag and bed of nails lead set



## "-TC" Models

The MIT410-TC and MIT430-TC are designed specifically for use within the telecommunications industry. Unique features include a soft canvas carrying bag with shoulder strap and snap hook to attach to a tool belt, and a "bed of nails" test lead set.

The model MIT430-TC offers extensive results storage capability for later recall and Bluetooth download capability for wireless transfer of stored results to a PC.

The MIT410-TC and MIT430-TC allow the user to determine the condition of the insulation of twisted copper cable pairs, which could cause problems for services such as voice, video, and data or VOIP. When the insulation becomes weak or brittle, causing cracks or exposing copper within the cable, or water ingresses into the cable, the insulation resistance test will identify these situations immediately.



Convenient probe storage on back of instrument



Rugged rubber boot with built-in stand



SP5 remote switch probes included with most units



Safe storage for probe caps

# 1-KV INSULATION TEST EQUIPMENT

Selection Guide for MIT400 Series

Applications	Industrial					Telecom/CATV					Special
Cat. No.	MIT400-EN	MIT410-EN	MIT415-EN (1000-351)	MIT420-EN	MIT430-EN	MIT410-TC (1000-368)	MIT430-TC (1000-369)	MIT480-EN	MIT481-EN	MIT485-EN	MIT40X-EN
<b>Insulation Voltage Range</b>											
50 V, 100 V		■		■	■	■	■	■	■	■	
250 V, 500 V	■	■		■	■	■	■		■	■	
1000 V	■	■		■	■		■		■	■	
10 to 100 V variable											■
Insulation range (GΩ)	20	100		200	200	100	200	10	200	200	2-20
<b>Continuity Measurement</b>											
KΩ range to 999 KΩ	■	■		■	■	■	■		■	■	
0.01 to 100 Ω	■	■	■	■	■	■	■	■	■	■	■
Variable current limit, 200 mA/20 mA	■	■		■	■	■	■	■	■	■	■
<b>Additional Functions</b>											
ac and dc voltage measurement (TRMS)	■	■	■	■	■	■	■	■	■	■	■
Frequency: 40 Hz to 400 Hz		■		■	■	■	■		■	■	■
Capacitance (0.1 nF to 10 μF)				■	■		■		■	■	
Insulation timed, PI, DAR tests		■		■	■	■	■		■	■	
<b>Additional Features</b>											
Result storage				■	■		■		■	■	
Compatible with Megger download software					■		■			■	
Bluetooth downloading					■		■			■	
<b>Included Accessories</b>											
Remote switch probe		■		■	■			■	■	■	
Silicone test leads	■	■	■	■	■			■	■	■	■
Bed of nails test leads						■	■				
Calibration certificate	■	■	■	■	■	■	■	■	■	■	
Carry case:											
Blow molded	■	■	■	■	■			■	■	■	■
Soft canvas (shown in picture on previous page)						■	■				
Three-year warranty	■	■	■	■	■	■	■	■	■	■	■
<b>List Price USD</b>	\$565.00	\$635.00	\$585.00	\$700.00	\$795.00	\$635.00	\$825.00	\$625.00	\$845.00	\$950.00	\$670.00

## 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, kΩ range, limit alarm and 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.



# 1-KV INSULATION TEST EQUIPMENT

Selection Guide for MIT300 Series

Cat. No.	MIT300-EN	MIT310-EN	MIT320-EN	MIT330-EN	MIT310A-EN Analog
<b>Insulation testing</b>					
250 V	■	■	■	■	■
500 V	■	■	■	■	■
1000 V		■	■	■	■
Range to 999 MΩ	■	■	■	■	■
Insulation limit alarm (0.01 MΩ to 999 MΩ)			■	■	
<b>Continuity testing</b>					
Continuity to 100Ω	■	■	■	■	■
Continuity buzzer	■	■	■	■	■
Lead null to 9 Ω	■	■	■	■	0.5Ω
Adjustable buzzer 1 to 20 Ω			■	■	
Audible buzzer disable			■	■	
<b>Resistance measurement</b>					
10 Ω to 1 MΩ range			■	■	
10 Ω to 2 KΩ range					■
<b>General</b>					
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	■	■	■	■	
Three-year warranty	■	■	■	■	
<b>List Price USD</b>	\$435.00	\$495.00	\$585.00	\$645.00	\$500.00

Selection Guide for MIT200 Series

Cat. No.	MIT200-EN	MIT210-EN	MIT220-EN	MIT230-EN
<b>Insulation testing</b>				
250 V			■	■
500 V	■		■	■
1000 V		■		■
1000 MΩ range	■	■	■	■
Auto-ranging	■	■	■	■
Auto discharge	■	■	■	■
Test inhibit	■	■	■	■
Live circuit voltage display	■	■	■	■
<b>Continuity testing</b>				
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	■	■	■	■
<b>General</b>				
Digital display + arc	■	■	■	■
Battery condition	■	■	■	■
Auto power down	■	■	■	■
Tough carry case	■	■	■	■
Test leads	■	■	■	■
CATIII 600 V	■	■	■	■
<b>List Price USD</b>	\$345.00	\$370.00	\$425.00	\$485.00

Model MIT310-EN



Model MIT230-EN



# 1-KV INSULATION TEST EQUIPMENT

## 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 six outstanding models.*

General Purpose  
Model



Digital  
Autoranging Model



High Resistance  
Model

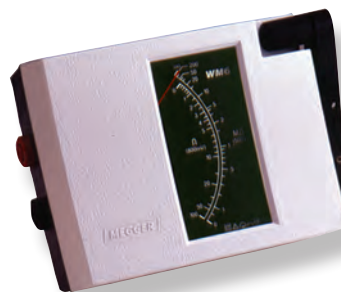


Model	Cat. No.	Test Voltage (V dc)	Insulation Resistance	Resistance Range	Power Source	List Price USD
General Purpose	212159	100, 250, 500, 1000	0 to 2000 MΩ	0 to 5000 Ω	Hand-cranked	\$1,000.00
	212359	100, 250, 500, 1000	0 to 2000 MΩ	0 to 5000 Ω	Line/Hand-cranked	\$1,075.00
	212459	100, 250, 500, 1000	0 to 2000 MΩ	0 to 5000 Ω	6 "AA" cells	\$1,000.00
	212559	100, 250, 500, 1000	0 to 2000 MΩ	0 to 5000 Ω	Line/Recharg. Battery with internal charger	\$1,075.00
Digital Autoranging	210600	100, 250, 500, 1000	0.10 to 1999 MΩ	0.01 to 19.99 kΩ	6 "AA" cells	\$1,040.00
High Resistance	210170	100	0 to 20,000 MΩ	0 to 5000 Ω	Hand-cranked	\$1,190.00
		250				
		500				
		1000				

**Request your particular instrument using the appropriate catalog number.**  
**Need help determining an instrument for your particular needs?**  
**Call your local Megger authorized distributor or dial 866-254-0962**

## Other Specialty 1-kV Insulation Testers

Cat. No.	Test Voltage	Features	List Price USD
WM6 (21805-3)	500	<ul style="list-style-type: none"> <li>Tests up to 200 MΩ at 500 V dc</li> <li>Easy-to-read high contrast analog scale</li> <li>Comes complete with case and leads</li> <li>Hand-cranked, "Midget Megger"</li> <li>0 to 100 Ω continuity range</li> </ul>	\$895.00





# ADDITIONAL INSULATION TEST EQUIPMENT

	Cat. No.	Test Voltages	Features	List Price USD
	MIT30	30 kV	<ul style="list-style-type: none"> <li>Continuously variable test voltage, 0-30 kV</li> <li>User selectable current trip point, 0-360 <math>\mu</math>Amp</li> <li>Robust bright LEDs visible in direct sunlight</li> <li>Built-in adjustable ionization indicator</li> <li>Wide input power range</li> </ul>	\$7,450.00
	MJ15	500, 1000, 2500, 5 kV	<ul style="list-style-type: none"> <li>Pass/Fail overlays for rapid "go/no go" testing and trend analysis</li> <li>Insulation resistance to 20 G<math>\Omega</math></li> <li>Voltage range to 600 V indicates auto discharge</li> <li>MJ15 hand-cranked and battery operated</li> <li>BM15 battery powered only</li> </ul>	\$2,410.00
	BM15			\$2,185.00
	<u>DC Dielectrics</u>			
	220005	5 kV	<ul style="list-style-type: none"> <li>Ideal for insulation resistance measurements in medium voltage equipment, maintenance and field testing applications</li> </ul>	\$3,110.00
	220015	15 kV	<ul style="list-style-type: none"> <li>Leakage current measurement as low as 0.1 <math>\mu</math>A</li> <li>Fast charging of high capacitance equipment</li> <li>Analog metering range switching for greater accuracy</li> <li>Continuously adjustable Variac</li> </ul>	\$4,190.00
	<u>Megohmmeters</u>			
	210400	5 kV	<ul style="list-style-type: none"> <li>Suitable for step voltage and dielectric absorption testing</li> <li>Analog metering for monitoring of variable measurements</li> </ul>	\$3,235.00
	210415	15 kV	<ul style="list-style-type: none"> <li>Guard terminal eliminates surface leakage current from the measurement</li> <li>Analog metering range switching for greater accuracy</li> <li>Continuously adjustable Variac</li> </ul>	\$4,555.00
<p><b>Request your particular instrument using the appropriate catalog number.</b>  <b>Need help determining an instrument for your particular needs?</b>  <b>Call your local Megger authorized distributor or dial 866-254-0962</b></p>				

# 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 [www.megger.com/us](http://www.megger.com/us)

Megger ground testers are very useful in the following markets:


- Airports
- CATV
- Commercial Building
- Electric Utility/Industrial Substations
- Government/Military
- Manufacturing
- Mining (open pit)
- Petrochemical
- Ports
- Railroads/Rapid Transit
- Telecommunications (Cellular, POTs, etc.)
- Universities
- Water/Waste Treatment
- Wind/Renewable Energy

PowerDB Lite, a unique software program, is included with the Megger ground testers.

Ground testing methods covered by PowerDB Lite include:

- Fall of Potential
- Four Potential
- Simplified Fall of Potential
- Slope
- Soil Resistivity
- Star Delta
- 61.8% Rule
- Intersecting Curves

See Page 35 for more information on this powerful software!





## 3-Terminal Model

This economically priced, general purpose instrument makes routine tests quick and easy for applications on simple grounding systems where a very low resistance is not expected.

- Tried-and-proven analog version
- Will tolerate 2 V peak-to-peak of voltage interference
- Measures ground resistance down to 0.5  $\Omega$
- Limits output to 50 V open circuit, 5 mA short circuit



Selection Guide for Three-Terminal Model

Cat. No.	Range Resistance	Power Source	Display	List Price USD
250260	0.5 $\Omega$ – 500 $\Omega$	Battery	Analog	\$910.00



# GROUND RESISTANCE TEST EQUIPMENT

## 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.



### What's in the DET3T Name?

#### **DET3TC**

**D** Digital  
**E** Earth  
**T** Tester  
**3T** 3 Terminal  
**C** Works with IClamp (optional)

#### **DET3TD**

**D** Digital  
**E** Earth  
**T** Tester  
**3T** 3 Terminal  
**D** Disposable Battery

## DET4T2 Enhanced Series

The newest 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 ICLAMP 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 VCLAMP, 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.



DET4TD2, above  
DET4TC2, left

# GROUND RESISTANCE TEST EQUIPMENT

## 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 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.

**DET3TC works  
with ICLAMP  
(not included)**

DET3 Series Selection Guide	DET3TC	DET3TD
2-wire Resistance	■	■
3-wire Resistance	■	■
ART (Attached Rod Technique) Resistance Measurement	■	
Resistance Range	0.01 to 2000 2% ± 3d	0.01 to 2000 2% ± 3d
Ground Voltage Range	0 to 100V	0 to 100V
Ground Current Range (with optional current measuring clamp)	0.5mA to 19.9A	
List Price USD	\$820.00	\$765.00

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 ICLAMP) 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 (49 ft, 33 ft, 33 ft, 10 ft) and Spikes	■	■	■	■
	External ac/dc adapter		■		■
	Certificate of Calibration	■	■	■	■
Warranty	3 Year	■	■	■	■
List Price USD		\$1,200.00	\$1,445.00	\$1,525.00	\$1,785.00



# GROUND RESISTANCE TEST EQUIPMENT

## What's in the DET4T Name?

### **DET4TD2**

- D** Digital  
**E** Earth  
**T** Tester  
**4T** 4 Terminal  
**D** Disposable Battery  
**2** 2nd Generation

### **DET4TR2**

- D** Digital  
**E** Earth  
**T** Tester  
**4T** 4 Terminal  
**R** Rechargeable Battery  
**2** 2nd Generation

### **DET4TC2**

- D** Digital  
**E** Earth  
**T** Tester  
**4T** 4 Terminal  
**C** Works with Clamp  
**2** 2nd Generation

### **DET4TCR2**

- D** Digital  
**E** Earth  
**T** Tester  
**4T** 4 Terminal  
**C** Works with Clamp  
**R** Rechargeable Battery  
**2** 2nd Generation

Model No.	Cat. No.	Included Accessories							Battery Type		List Price USD
		Hard carry case	4 Right-angle terminal adapters	Leads & spikes	External ac/dc Adapter	Field Calibrator	ICLAMP and VCLAMP	Earth/ground kit, C/N 6320-245	Disposable	Rechargeable	
DET4TD2	1000-347	■	■	■					■		\$1,200.00
DET4TR2	1000-324	■	■	■	■					■	\$1,445.00
DET4TC2	1000-345	■	■	■					■		\$1,525.00
DET4TC2+Clamps	1000-365	■	■	■		■	■		■		\$2,230.00
DET4TC2+Kit	1000-404	■	■	■		■	■	■	■		\$2,805.00
DET4TCR2	1000-346	■	■	■	■					■	\$1,785.00
DET4TCR2+Clamps	1000-366	■	■	■	■	■	■			■	\$2,495.00
DET4TCR2+Kit	1000-405	■	■	■	■	■	■	■		■	\$3,045.00



## Professional Ground Testing Kit

*Can be used with any DET3 or DET4 models*

Contents:

- Red and black cable reels (50 m); yellow and green cable reels (30 m)
- Earth electrode lead (4 m green, 4 mm shrouded plug and large croc clip)
- Auger style spikes - 4
- Fiberglass measuring tape, 50 m
- Molded polyethylene carrying case

### Ordering Information

Cat. No.	Description	Unit Price USD
6320-245	Electrode and soil resistivity stake and wire kit	\$690.00

# GROUND RESISTANCE TEST EQUIPMENT

## DET10C and 20C Clamp-on Models

The Megger models DET10C and 20C are a useful addition to the more traditional methods of earth/ground resistance testing that may require disconnection and the use of stakes or ground rods. Simply clamp around the conductor or stake/rod and measure the resistance to ground quickly and accurately.

The DET10C and 20C can be used to measure earth/ground resistance in multiple loop installations without disconnecting the earth or ground, allowing quick and easy testing in total safety.

These clamp-on testers feature improved ground resistance ranges from  $0.025\Omega$  to  $1550\Omega$  and ground leakage current from 0.2 mA to 35 A.

In a multiple-ground system, the testers will measure the ground resistance of the clamped electrode only, while simultaneously performing a bonding check of the entire system. **Conversely, they cannot be used to test an isolated electrode.**

The units are rugged, compact and have configurable audible alarms. They feature auto shutdown (which is also configurable), data storage and self calibration on power-up, and are supplied with a calibration loop – all contained in a rugged carry case.

The DET20C also comes with a USB interface cable and is compatible with Megger Download Manager Software (included) allowing further analysis and storage of data.



DET10C and 20C come with a rugged carry case, calibration fixture, carry case shoulder strap and interface cable (DET20C only).



Selection Guide for Clamp-on Models

Model No.	Range Resistance	Power Source	Display	List Price USD
DET10C	0.025 — 9,999 $\Omega$ 10 — 99.99 $\Omega$ 100 — 199.9 $\Omega$	Battery	Digital	\$1,500.00
DET20C	200 — 400 $\Omega$			\$1,660.00
	400 — 600 $\Omega$			
	600 — 1550 $\Omega$			

# GROUND RESISTANCE TEST EQUIPMENT

## DET2/2 High Sensitivity Model

The MEGGER DET2/2 offers 40 V tolerance and .001 resolution readings. The features of the DET2/2 include an interference filter (on/off) and test current control (high/low). But above all, the test current frequency is adjustable in half-Hertz increments over the full range from 105 to 160 Hz. If soil transients are affecting the measurement, a display annunciator alerts the user.

The extra capabilities of the DET2/2 will quickly prove indispensable when testing in extreme electrical environments around substations or heavy industrials.



### Selection Guide for High Sensitivity Model

Model No.	Range Resistance	Power Source	Display	List Price USD
DET2/2	0.010 $\Omega$ – 19.99 k $\Omega$	Rechargeable Battery	Digital	\$4,845.00

# AC LOOP IMPEDANCE TESTERS

## LT300 High Current Loop Tester

The LT300 offers high current loop testing over a wide range of frequencies and supply voltages with simple, fast, two-wire operation. Its large clear display aids visibility in poor conditions.

The LT300 measures loop impedance of live circuits from “hot” to neutral or “hot” to ground. Two loop impedance ranges are provided:

20  $\Omega$  — resolution to 0.01  $\Omega$

200  $\Omega$  — resolution to 0.1  $\Omega$

The instrument is housed in a rubber armored case with a built-in cover to protect the display when not in use. The IP54 weatherproof rating provides excellent protection in adverse conditions.

The LT300 is supplied with a two wire (red/green) lead set, a certificate of test, and a hard carry case.



### Ordering Information

Cat. No.	Description	List Price USD
LT300	High current loop tester	\$680.00



# DIGITAL 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 Digital Low Resistance Ohmmeters, under the DLRO trade mark, providing accurate and reliable measurements with test currents ranging from a few  $\mu\text{A}$  to 600 A suitable for many applications.

These instruments are used in markets such as:

- Airports
- Electric Utilities/Industrial Substations
- Government/Military
- Ports
- Power Plants
- Railroads/Rapid Transit
- Telecommunications (Cellular, POTs, etc.)
- Universities
- Water/Waste Treatment
- Wind/Renewable Energy

## **DLRO10HD NEW**

The all new DLRO10HD is a heavy-duty addition to the successful DLRO10 range. Common with the DLRO10 series the instrument features output power limiting to  $0.25 \Omega$  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 truly heavy duty in all respects — physically the instrument 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. It's electrically heavy duty too; 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, but is equally 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.

## **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  $4\frac{1}{2}$ -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.



### **NEW DLRO10HD**

- Battery powered
- Line powered
- IP65 lid closed
- IP54 in use



DLRO-10, shown above  
Shown at right, DLRO-10X

# DIGITAL LOW RESISTANCE OHMMETERS

## 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



General Purpose Model (247001)

## DLRO200 and DLRO200-115

The DLRO200 can provide test currents from 10 amps up to 200 amps subject to the load resistance and supply voltage. Its unique design allows the weight and size of DLRO200 to be kept to a minimum.

The high current capability and compact design make the DLRO200 suitable for testing circuit breaker contacts, switch contacts, busbar joints or other applications where high current is needed.

A full QWERTY keyboard allows you to set the test current by typing in the value required and annotate test results for further analysis.

For applications that demand a smooth dc current, the DLRO200-115 has extra filtering on the output to reduce mains frequency ripple and can drive 200 amps through a total current loop resistance of 11 milliohms. The filtered output of the DLRO200-115 eliminates magnetic transients that could inductively trip a breaker's control if left in the test circuit.

## BT51 Milli-Ohmmeter

- Stable, accurate and reliable
- Two measuring ranges (2000  $m\Omega$  and 20.00  $m\Omega$ )
- Four terminal measurement

### Ordering Information

Cat. No.		List Price USD
BT51	Milliohmmeter	\$2,650.00



DLRO200

# DIGITAL LOW RESISTANCE OHMMETERS

Selection Guide for Digital Low Resistance Ohmmeters

Cat. No.	DLRO10HD (1000-348)	DLRO-10	DLR0-10X	247000	247001	247002	DLRO200	DLRO200-115
<b>Output Current</b>								
10 Amp	■	■	■	■	■	■		
200 Amp†							■	■
Additional Smoothing								■
<b>Resistance Range</b>								
0 to 599.9 $\mu\Omega$						■		
0 to 1.9999 m $\Omega$		■	■					
0 to 5.999 m $\Omega$				■	■	■		
0 to 19.999 m $\Omega$		■	■					
0 to 59.99 m $\Omega$				■	■	■		
0 to 199.99 m $\Omega$		■	■			■		
0 to 599.9 m $\Omega$				■	■	■		
0 to 1.9999 $\Omega$		■	■			■		
0 to 5.999 $\Omega$				■	■	■		
0 to 19.999 $\Omega$		■	■			■		
0 to 59.99 $\Omega$				■	■	■		
0 to 199.99 $\Omega$		■	■					
0 to 1999.9 $\Omega$		■	■					
0.1 $\mu\Omega$ to 999.9 m $\Omega$							■	■
0 to 2500.0 $\mu\Omega$	■							
0 to 25.000 m $\Omega$	■							
0 to 250.00 m $\Omega$	■							
0 to 2500.0 m $\Omega$	■							
0 to 25.000 $\Omega$	■							
0 to 250.00 $\Omega$	■							
0 to 2500.0 $\Omega$	■							
<b>Resolution</b>								
*0.1 $\mu\Omega$	■	■	■			■	■	■
1 $\mu\Omega$	■	■	■	■	■	■		
10 $\mu\Omega$	■	■	■	■	■	■		
100 $\mu\Omega$	■	■	■	■	■	■		
1 m $\Omega$	■	■	■	■	■	■		
10 m $\Omega$	■	■	■	■	■	■		
100 m $\Omega$	■	■	■					
<b>Accuracy</b>								
0.2% + 2 lsd		■				■		
0.25% + 1 lsd				■	■			
0.3% + 2 lsd						■		
*0.5% + 2 lsd							■	■
*1.00%							■	■
0.2% 200 m $\Omega$	■							
0.2% 20 m $\Omega$	■	■	■					
0.2% 2 m $\Omega$	■	■	■					
0.2% 200 $\mu\Omega$	■							
0.2% 20 $\mu\Omega$	■	■	■					
0.2% 2 $\mu\Omega$	■	■	■					
0.2% 0.2 $\mu\Omega$	■	■	■					
<b>Power Source</b>								
Rechargeable Battery	■	■	■	■	■	■		
Line Power	■						■	■
<b>List Price USD</b>	\$3,200.00	\$2,960.00	\$3,690.00	\$3,312.00	\$3,292.00	\$4,467.00	\$5,470.00	\$5,900.00

† Configurable current output: 10 A to 200 A

\* Varies with current



# DIGITAL LOW RESISTANCE OHMMETERS

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.

## Helical Spring Points

Tips rotate and compress into the probe's body to ensure accurate measurement. Cat. No. 242011-7, 242011-18, 242011-30, 242009-18



Cat. No. 242011-7

## Heavy Duty Fixed Points

Economical, light weight and durable. Cat. No. 242002-7, 242002-18, 242002-30



Cat. No. 242002-7

## Heavy Duty C-Clamps

Current passes through the C-Clamp and screw thread; potential passes through a four-point anvil insulated from the clamp metal. Cat. No. 242004-7, 242004-18, 242004-30



Cat. No. 242004-18

## Kelvin Clips

Feature spade lugs on outboard end and alligator clips with insulated, silver or gold plated jaws. Cat. No. 241005-7, 242005-7, 242006-7, 242006-18, 242006-30



Cat. No. 241005-7

## Hand Spikes, DH Series

Feature indicator lights in one of the probes which duplicate warning and signal lights on the instruments. Cat. No. EV6111-503 (DH4), EV6111-517 (DH5).



Cat. No. EV6111-503

**NEW**

## Wind Turbine Lightning Protection Test Lead Set

Specially designed for measuring resistance of lightning protection circuit between wind turbine blade tip to ground. Cat. No. 1000-809



## Individual Test Leads

Cat. No.	Type	Termination	Length	Current	List Price
242021-7	Potential	Hand Spikes	7 ft. (2 m)	N/A	\$275.00
242021-18			18 ft. (5.5 m)		\$350.00
242021-30			30 ft. (9 m)		\$395.00
242041-7	Current	Terminal Clips	7 ft. (2 m)	10 A	\$235.00
242041-18			18 ft. (5.5 m)		\$275.00
242041-30			30 ft. (9 m)		\$310.00
242144-16	Current	Clamps	16 ft (5 m)	100 A	\$825.00
242144-26			26 ft (8 m)		\$851.00

## Duplex Test Leads

Cat. No.	Termination	Length	Current	List Price
242011-7	Helical Hand Spikes with Spring Points	7 ft. (2 m)	10 A	\$629.00
6111-022		8 ft (2.5 m)	10 A	\$385.00
242011-18		18 ft. (5.5 m)	10 A	\$702.00
6111-023		20 ft. (6 m)	10 A	\$535.00
242011-30	Duplex Hand Spikes	30 ft. (9 m)	10 A	\$725.00
6111-503*		4 ft. (1.2 m)	10 A	\$440.00
6111-517*		8 ft. (2.5 m)	10 A	\$465.00
6111-518*		4 ft. (1.2 m)	10 A	\$435.00
242009-18	Helical Hand Spikes with Spring Points and Current Push-button Switch	18 ft. (5.5 m)	10 A	\$510.00
242002-7	Heavy-Duty Fixed-Point Hand Spikes	7 ft. (2 m)	10 A	\$460.00
242002-18		18 ft. (5.5 m)	10 A	\$650.00
242002-30		30 ft. (9 m)	10 A	\$733.00
242003-7	Replaceable Needle Points	7 ft. (2 m)	10 A	\$651.00
242104-2-16	Heavy-duty C-clamps	16 ft (5 m)	100 A	\$805.00
242104-2-26		26 ft (8 m)	100 A	\$915.00
242004-7		7 ft. (2 m)	10 A	\$350.00
242004-18		18 ft. (5.5 m)	10 A	\$445.00
242004-30		30 ft. (9 m)	10 A	\$515.00
241005-7**	0.5 in. (1.3 cm) Kelvin Clips	7 ft. (2 m)	10 A	\$480.00
242005-7***		7 ft. (2 m)	10 A	\$165.00
242006-7	1.5 in. (4 cm) Kelvin Clips	7 ft. (2 m)	10 A	\$290.00
242006-18		18 ft. (5.5 m)	10 A	\$425.00
242006-30		30 ft. (9 m)	10 A	\$750.00
6220-755	Current Lead with HD Clips and Separate Potential Leads with Clips	16 ft (5 m)	600 A	\$720.00
6220-756		33 ft (10 m)	600 A	\$1,360.00
6220-757		49 ft (15 m)	600 A	\$2,395.00
6220-787		16 ft (5 m)	200 A	\$655.00
<b>NEW</b> 1000-809*	Kelvin clip and hook ends on HD cable reel with friction brake	328 ft (100 m)	10 A	\$1,200.00
	DH2 lead with duplex hand spikes and hook end	16 ft (5 m)		

\* Used with DLRO10 and DLRO10X only

\*\* Gold plated

\*\*\* Silver plated

# MULTIMETERS

Megger multimeters provide the complete solution to electrical and electronic troubleshooting. All instruments undergo rigorous testing throughout their design and manufacture and are suitable for use in the following markets:

- Airports
- Commercial Building
- Electric Utilities
- Government/Military
- Manufacturing
- Mining
- Petrochemical
- Ports
- Telecom (Cellular, POTs, etc.)
- Universities
- Water/Waste Treatment
- Wind/Renewable Energy

## M8000 Series

### M8035

- Professional multimeter with 0.08% accuracy and enhanced functions
- Adds relative functions, MIN, MAX, MAX-MIN, AVG
- Store and recall
- Complies with IEC1010 Cat III 1000V

### M8037

- True RMS professional multimeter
- Store and recall
- 0.08% accuracy with backlit dual display
- Complies with IEC1010 Cat III 1000V



M8037

## AVO300 Series

- All units feature simple to use autoranging functions
- The unique case design has a separate fuse and battery compartment
- The rubber-armored case is extremely tough and has an integral rear stand
- The large display is easy to read with .75 in. (19 mm) high characters. The AVO310 features a backlight
- Powered from a standard 9V battery
- Meet the safety requirements of CAT III 600V



## VF2 AC Voltage Detector

- Non-contact detection of ac voltage
- Automatic audible warning buzzer
- Also doubles as a flashlight



Cat. No.	Description	List Price USD
1000-213	VF2 AC Voltage Detector	\$9.95

## Selection Guide for Multimeters

Cat. No.	AVO300	AVO310	M8035	M8037
<b>Voltage Ranges</b>				
V ac	1000	1000	750	750
V dc	1000	1000	1000	1000
V ac/dc				■
<b>Accuracy</b>				
	1%	1%	0.08%	0.08%
<b>ac Conversion Type</b>				
Average Responding	■	■	■	
TRMS				■
<b>Current Ranges</b>				
A ac	10	10	10	10
A dc	10	10	10	10
<b>Resistance</b>				
	40 MΩ	40 MΩ	40 MΩ	40 MΩ
<b>Continuity</b>				
Audible Buzzer	■	■	■	■
Diode	■	■	■	■
<b>Conductance in nS</b>				
			400	400
<b>Capacitance in mF</b>				
			40	40
<b>Frequency in Hz</b>				
			4 M	4 M
<b>Duty Cycle</b>				
				■
<b>Display</b>				
Single Parameter	■	■		
Dual Parameter			■	■
Number of Digits	$3\frac{1}{2}$	$3\frac{1}{2}$	$4\frac{3}{4}$ & $3\frac{3}{4}$	$4\frac{3}{4}$ & $3\frac{3}{4}$
Bar graph			■	■
Backlit		■		■
<b>Operation</b>				
Auto Ranging	■	■	■	■
Data Hold	■	■	■	■
Max/Min Record		■	■	■
Relative Function			■	■
<b>Rubber Boot Protection</b>				
	■	■	■	■
<b>Safety</b>				
	Cat III 600 V	Cat III 600 V	Cat III 1000 V	Cat III 1000 V
<b>Warranty Period</b>				
	3 year	3 year	3 year	3 year
<b>List Price USD</b>				
	\$108.00	\$131.00	\$316.00	\$381.00

Megger clampmeters are ideal for use in the installation, maintenance, monitoring, or checking of electrical systems and equipment. These products offer a safe, accurate, non-intrusive method of diagnosing faults on live electrical circuits.

## MMC850 Multi-conductor AC Digital Clampmeter

- A unique solution to current measurement in multiconductor cables
- No need to split cables
- Flat or round section cables
- Backlit display
- Cable centralizing clamp
- Measure current on single-, two- and three-conductor cables in one step



### Ordering Information

Cat. No.	List Price USD
MMC850 Multi-conductor ac Digital Clampmeter	\$295.00

## DCM330

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



## DCM300E AC Leakage Clampmeter

- Designed for non-intrusive measurement of leakage current
- 300 A range for standard current measurement
- Resolution to 0.01 mA for recognition of minute leakage currents
- Data hold button retains the measurement on the LCD for viewing at a later time

### Ordering Information

Cat. No.	List Price USD
DCM300E Leakage Clampmeter	\$440.00



## DCM310, DCM320, DCM340

- Resistance measurement up to 20 M $\Omega$  on DCM320; 400  $\Omega$  on DCM340
- Measures ac current up to 600 A
- Data hold feature
- Meet safety requirements of IEC 1010 CAT III 600V



DCM310

### Ordering Information for DCM Series

Cat. No.	Measurement Range	List Price USD
DCM310-EN	400 A ac	\$62.00
DCM320-EN	400 A ac	\$94.00
DCM330-EN	200 A ac	\$118.00
DCM340-EN	600 A ac/dc	\$168.00



# 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.

Megger time domain reflectometers are used in the following markets:

- Airports
- CATV
- Commercial Building
- Government/Military
- Manufacturing
- Petrochemical
- Power Utilities
- Telecoms (Cellular, POTs, etc.)
- Universities

## **TDR900**

- Digital read-out TDR and cable length meter
- Autoranging for measuring power, telephony, CATV and LAN cable lengths
- Extra large, high resolution backlit LCD
- Internal library of 39 standard cable types
- Cable length calibration function
- Used only on de-energized circuits

## **TDR500**

- Full TDR trace at a low cost
- Adjustable velocity factor
- Warble tone generator for tracing faulty cable pairs
- Used only on de-energized circuits



CF535F shown in use





## **CFL510F**

- Automatic event finder key
- No blocking filter required for live line testing up to 300 V ac
- Simple keypad; bright, backlit LCD

## **CFL535F/CFL535P**

- No blocking filter required for live line testing up to 300 V ac
- Output pulse amplitude control
- Automatic event finder key
- Graphical help menu
- Dual channel, stress and comparison of previous traces
- Comes equipped with dual fused, fitted test leads

# TIME DOMAIN REFLECTOMETERS

<b>TDR Specification Guide</b>					
	<b>Cat. No.</b>	<b>TDR900</b>	<b>TDR500</b>	<b>CFL510F</b>	<b>CFL535F (CFL535P*)</b>
	Measurement Ranges (Full scale)	6200, 8000, 9800, 12,000 ft (1900, 2400, 3000, 3700 m)	100, 300, 1000, 3000, 10,000 ft (30, 100, 300 1000, 3000 m)	30, 90, 300, 900, 3000, 9000 ft (10, 30, 100, 300, 1000, 3000 m)	150, 300, 600, 1200, 24,000, 48,000 ft (50, 100, 200, 400, 4000, 8000, 16,000 m)
	Fault Location Modes	1	1	1	11
	Display	Numeric	Graphic	Graphic	Hi resolution/Graphic
	Accuracy	±2 %	±1 %	±1 %	±0.1 %
	Resolution	20 in. (50 cm)	1% of range	1% of range	0.1% of range
	Gain	N/A	Automatic	4 steps	15 steps to 90 dB
	Velocity Factor	1.0 to 99.9%	0.30 to 0.99	0.01 to 0.99	0.300 to 0.999
	Output Impedance (Ω)	25, 50, 75, 100, 125, 150 Automatically set	100	25, 50, 75, 100	120
Output Pulse	7 ns - 3 μs	25 ns - 3 μs	7 ns - 3 μs	20 ns - 16 μs	
Pulse Amplitude	5 V pk to pk	5 V pk to pk	nominal 3 V; 5 V	5 V pk to pk and 14 V pk to pk	
Low Battery Warning	■	■	■	■	
Backlight	■	N/A	■	■	
TX Null	N/A	N/A	■	■	
Channels	1	1	1	2	
Auto Shutdown	■	■	■	■	
Result Storage	N/A	N/A	N/A	■	
Download to PC	N/A	N/A	N/A	■	
Printer Connection	N/A	N/A	N/A	■	
Rating	IP42	IP54	IP54	IP54	
Included Accessories					
Lead Set*	■	■	■	■	
Test/Carry Case	■	■	■	■	
Serial Download Lead	N/A	N/A	N/A	■	
Download Software	N/A	N/A	N/A	■	
Batteries	■	■	■	■	
3-Year Warranty	■	■	■	■	
List Price USD	\$380.00	\$670.00	\$1,645.00	\$3,115.00	
<b>*Note: Cat. No. CFL535P comes equipped with dual fused, fitted test leads.</b>					
<b>Request your particular instrument using the appropriate catalog number.</b> <b>Need help determining an instrument for your particular needs?</b> <b>Call your local Megger authorized distributor or dial 866-254-0962</b>					

Megger Structured Cable Testers are designed specifically for cable installers and network owners who need to certify the performance of high-speed cabling to today's industry standards and tomorrow's emerging standards. This includes:

- LAN installation contractors
- Electrical contractors
- IT service providers
- Network administrators
- Low voltage/telecom contractors

**Exceptional Capability — Extraordinary Value**

## **SCT Series Structured Cable Testers**

**NEW**

The SCT Series are high-performance testers for certifying and evaluating copper and fiber cabling installations. The SCT Series are unmatched for flexibility, with device features including large 1/4 VGA color display, USB and serial ports, compact flash, secure digital multimedia card storage, unit-to-unit audio and 64 Mb of internal memory.

The SCT Series certifies twisted pair to all approved ISO and TIA standards, including ISO Class F. Their frequency range of 1 to 1,000 Mhz (1 GHz) exceeds ISO Class F by 400 MHz and meets proposed TIA Category 6a requirements. The Series also meet Level III and proposed Level IV accuracy requirements.

**Important features include:**

- Saves test time by allowing the user to select or modify the Circuit Identification number during a test
- Improved results analysis by displaying results in multiple formats
- Selectable link diagnostics from the test menu for quickly identifying the distance to the source of a link fault
- Powerful link diagnostic results displayed in multiple formats to speed link fault correction
- Unique "connector-less" recessed copper and fiber optic adapters eliminate virtually all potential adapter or tester damage, keeping the SCT "on the job"



## **SCT Series Multimode and Singlemode Fiber Adapters**

**NEW**

The SCT-MMA and SCT-SMA fiber optic adapters convert the Megger SCT series instruments into a fully compliant Tier 1 multimode and singlemode fiber optic certification tester. The SCT fiber solution offers more features and benefits than any other unit.

**Features include:**

- 10-second fully compliant Tier 1 testing, faster than any existing fiber certification unit
- Change from copper to fiber testing by snapping in an adapter, no configuration necessary
- Speed diagnostics with built in VFL that can locate and visibly identify faults on fiber optic cables
- Tools to speed testing include Fiber Map, bi-directional and unidirectional testing
- Rugged fiber optic adapter with patented "connector-less" interface reduces down time



## **SCT Alien Crosstalk Adapter**

**NEW**

The Megger Alien Crosstalk certification kit is the most cost effective, intuitive and easy to use 10GBASE-T certification solution on the market. It is fully compliant with all existing and draft 10GBASE-T standards.

- Performs alien crosstalk certification for copper 10GBASE-T ethernet network deployment
- Measurement capabilities include PSANEXT, PSANEXTavg, PSAACRF and PSAACRFavg

### **Ordering Information for Datacom Test Equipment**

Cat. No.	Description	List Price USD
SCT2000	Structured Cable Tester	\$7,295.00
SCT1500	Structured Cable Tester	\$6,695.00
6111-766	SCT-MMA set of two multimode fiber adapters	\$4,050.00
6111-765	SCT-SMA set of two singlemode fiber adapters	\$5,200.00
1000-984	SCT-AXT set of two alien crosstalk adapters	\$1,575.00



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

## Handheld TTR20

The TTR20 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 TTR20 is the perfect tool for testing transformers for turns ratio, polarity and excitation current. It is primarily designed to fill a need for simple, push-to-test transformer testing. The TTR20 allows the user familiar with transformer testing to obtain results without transformer configuration knowledge.

The TTR20 is so small and easy to use that it can be utilized in fleet service. Its high accuracy delivers the results that users are looking to achieve.

The significant features of the TTR20 include:

- Fewer buttons and no menus to make it extremely easy to use and acquire data.
- No PC software needed to learn to upload data. Simply use HyperTerminal.
- Prints data in real-time to maintain hard copies of test results.
- Replaceable "AA" (IEC LR6) batteries that last 12 hours or more (if using the specified batteries.)
- Measures turns ratio, polarity and excitation current.



### Ordering Information

Cat. No.		List Price USD
TTR20	Handheld Transformer Turns Ratio Test Set	\$2,495.00

## 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

Cat. No.		List Price USD
550005B	Single-phase, hand-crank Transformer Turns Ratio Test Set	\$4,550.00

## Semi-automatic Oil Test Set

- Lightweight, portable unit for field use
- Suitable for all oil breakdown testing to 60 kV
- Automatic 1 minute timer for easy withstand testing
- Vessels required to operate and can be ordered separately



### Ordering Information

Cat. No.	Description	List Price USD
OTS60SX (6410-857)	Semi-automatic Oil Test Set	\$3,250.00
6320-233	Spherical-type vessel	\$315.00
6320-234	Mushroom-type vessel	\$315.00
6111-356	Cylindrical-type vessel	\$670.00

For complete specifications, go to [www.megger.com/us](http://www.megger.com/us)

# BATTERY IMPEDANCE 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.

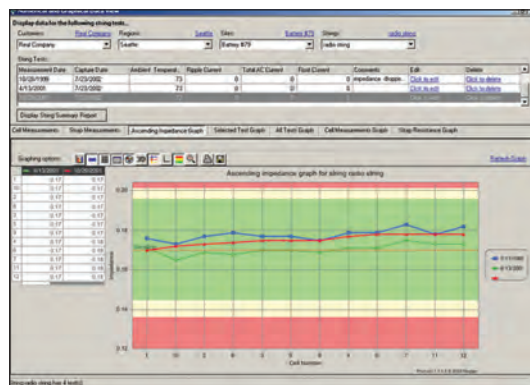
Megger battery testers are very useful in the following markets:

- Airports
- Electric Utility/Industrial Substations
- Government/Military
- Manufacturing
- Ports
- Power Plants
- Railroads/Rapid Transit
- Telecommunications (Cellular, POTs, etc.)
- Universities
- Water/Waste Treatment

## ProActiv™ Battery Database Management Software

A powerful, easy-to-use battery database management software designed to analyze individual batteries in a battery system.

- Organizes and manages battery data
- Performs trending analysis
- Assists the user to manage multiple batteries
- Easy-to-use graphical navigation
- Uses various data import and data entry wizards
- Prints basic reports



## BITE 3

The BITE 3 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. Its firmware is upgradeable through the internet.

The BITE 3 comes complete with:

- ProActiv software (see box, left)
- Dual point test leads (7 ft)
- Canvas carrying case
- Line charger
- RS232 modem cable
- Spare test lead tips

The BITE 3, combined with ProActiv, is extremely useful in determining the health of batteries and to plan their replacements in an orderly, non-emergency manner. The BITE 3 and ProActiv are the most powerful battery management system available today.

### Ordering Information

Cat. No.		List Price USD
BITE3	Battery Impedance Test Equipment	\$6,188.00



# BATTERY IMPEDANCE TEST EQUIPMENT

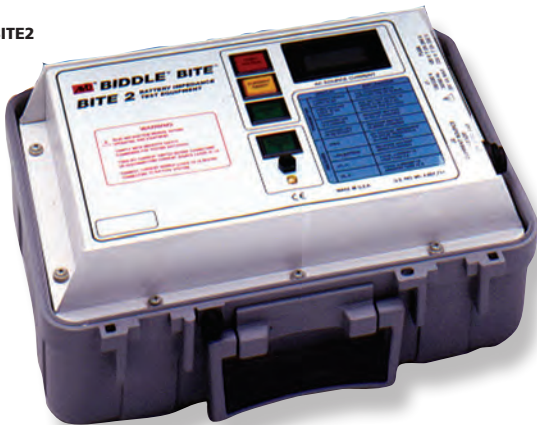
## BITE 2 and BITE 2P

The BITE 2 and BITE 2P determine the condition of lead-acid and nickel-cadmium cells up to 7000 Ah such as in telco, UPS, substation and many more.

The BITE 2 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 BITE 2P has a built-in printer** to review data, find weak cells, and leave a hard copy record at the site.

BITE2



BITE2P



### Ordering Information

Cat. No.	Description	List Price USD
BITE2	Battery Impedance Test Equipment	\$6,630.00
BITE2P	Battery Impedance Test Equipment with built-in printer	\$7,410.00



# SPECIAL MAINTENANCE EQUIPMENT

Megger offers a wide range of test and measuring instruments for unique applications. These high quality, easy to use instruments include:

- Electrical Appliance Testers
- Leak and Corona Testers
- Cable Locators/Tracers/Cable Height Meters
- Coating Thickness Gauges
- Three-Phase Sequence Equipment

## Electrical Appliance Testers

### High-pot Testers

- 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



Cat. 230415 shown

### Tool and Appliance Tester

- Full conformance to latest UL and ANSI test requirements
- Test procedures color coded in sequence on front panel for ease of use
- Ground check bypass switch permits testing of 2-wire or double insulated devices
- Removable lid with metal tray to hold device under test
- 25 A at 3 V ground check
- 10 mA at 120 V leakage test
- 12.5 mA at 3 kV dielectric withstand test
- 15 A at 120 V function test



### Portable Appliance Tester **NEW**

- Full safety testing of portable electrical equipment
- Simple push-button operation
- Pass/Fail indicators
- Full-color display
- 10 A and 25 A bond test at 9 V ac
- 100 Megohm insulation test at 250 and 500 V dc
- 10 Ohm continuity test at 200 mA
- 20 mA leakage test at 40 and 110 V ac
- 4 kVA operational test at 110 V ac



#### Ordering Information for Electrical Appliance Testers

Cat. No.	Description	List Price USD
230315	AC High-pot Tester, 0 to 3 kV ac	\$2,000.00
230415	AC High-pot Tester, 0 to 4 kV ac	\$2,000.00
230425	AC/DC High-pot Tester 0 to 4 kV ac, 0 to 5 kV dc	\$2,495.00
235303	Tool and Appliance Tester	\$5,195.00
1000-740 (PAT320-US)	Portable Appliance Tester	\$1,495.00

## Cable Locators/Route Tracers

### Energized Cable Tracer

- Compact and lightweight — only 2.5 lbs (1.13 kg)
- Locates and traces cable energized with 50/60 Hz
- Three-way swivel detector measures cable depth
- Provides up to 150 hours of operation



### Cable Height Meter

- Inherently safe
- No physical connection to cables under test
- Noise and stray signal rejection
- Measures the height of up to 6 overhead cables



### Split-box Pipe and Cable Locator

- Locates buried manhole covers
- Energized or de-energized line tracing
- Conductive or inductive coupling
- Peak and null detection capabilities



### AccuTrace® Cable Route Tracer

- No need for headphones with the receiver's audio output
- Optional watertight capsule transmitter finds blockage in pipes
- Range 5 ft to 3 miles ( 1.5 m to 4.8 km)
- Conductive or inductive coupling



### Ordering Information for Cable Locators and Cable Route Tracers

Cat. No.	Description	List Price USD
656601	Energized Cable Tracer	\$720.00
656902	Split-box Pipe and Cable Locator	\$970.00
656621	AccuTrace Cable Route Tracer	\$1,945.00
CHM2000	Telecom Cable Height Meter, 35 ft (11 m)	\$710.00
659600	Power Cable Height Meter, 50 ft (15 m)	\$840.00
659600E	Power Cable Height Meter, 75 ft (23 m)	\$960.00

# SPECIAL MAINTENANCE EQUIPMENT

## Three-Phase Sequence Equipment

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

- Phase and motor rotation testers to determine motor rotation without energizing the motor
- 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

### 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



Cat. No. 560060

### Cable Phasing Meter

- 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

Cat. No. 565250

- Neon tube indicators for quick identification
- Quick, simple indication of correct or incorrect phase sequence
- Insulated leads with alligator clips
- Indicates faulty phase

Model PSI-700

- 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. 565250

### Selection Guide for Three-phase Sequence Equipment

Cat. No.	Description	Max Voltage	Frequency (Hz)	List Price USD
560060	Motor and Phase Rotation Tester	600 V	50/60	\$955.00
560400	Motor and Phase Rotation Tester	600 V	25/50/60/400	\$1,050.00
830220-1	Cable Phasing Meter	30 kV	50/60	\$2,290.00
565250	Phase Sequence Tester	600 V	50/60	\$205.00
PSI-700	Phase Sequence Tester	700 V	50/60	\$500.00



Leak & Corona Detectors

- Screens out audible noise levels
- Detects, within inches of the source, a 0.002"-diameter gas or air leak from 5 ft. away for safety, with only 10 psi pressure
- Directional pickup horn permits pinpointing of discharges (corona) in high-voltage equipment from a safe distance
- Contact probe available for detection of ultrasound in environments other than air



Ordering Information

Cat. No.		Unit Price USD
569001	Ultrasonic Leak and Corona Detector	\$1,460.00
569001-7	Tone Generator	\$230.00
569001-8	Contact Probe	\$205.00

Coating Thickness Gauge

- Pencil size; easy to carry and use
- Use on curved or irregular surfaces
- Nondestructive
- Stabilized magnet not affected by vibrations and temperature
- Read measurements directly from scale
- Three gravity-compensated indicators for use in vertical, horizontal, and upside-down positions



Ordering Information

Cat. No.	Range	Accuracy	List Price USD
280282	0.00025 to 0.020 in. 5 to 500 microns (μ)	10% or 0.1 mil. whichever is greater	\$280.00

## Voltage Detectors and Phasing Testers

### 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 guidelines for capacitive high-voltage test instruments
- Telescopic 48-in. pole retracts to 34-in. for easy storage when not in use

### DETEX® Phasing Testers

- Ideal for use on grounded and ungrounded ac systems to check high-voltage fuses
- Analog models (514500 series) are ideal for areas where an LED lamp is not easily visible
- 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
- Handguards are standard on lower voltage models
- High voltage units are fitted with universal spline-fitting for attachment to a standard hot stick

### 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

**NOTE:** This unit is **not** a voltage detector



Cat. No. 514440-2  
Voltage Detector



Cat. No. 514242  
Transmission Line Voltage Detector



Analog Phasing Tester  
C/N 514500-2



Cat. No. 510900  
Single-pole Phase Comparator

# SAFETY TEST EQUIPMENT

## Ordering Information for Voltage Detectors & Phasing Testers

Cat. No.	Operating Voltage	Indicator Type	List Price
<b>Voltage Detectors</b>			
514360-1*	2.3 to 7.2 kV	Red LED & audible	\$1,220.00
514360-2	4 to 14.5 kV	Red LED & audible	\$1,190.00
514360-3	11.7 to 36.2 kV	Red LED & audible	\$1,215.00
514360-4	24.3 to 72.5 kV	Red LED & audible	\$1,205.00
514242-1	67 to 235 kV	Red LED & audible	\$1,815.00
514242-2	200 to 550 kV	Red LED & audible	\$1,815.00
514440-2*	3.6 to 36.5 kV	White LED	\$820.00
<b>Phasing Testers</b>			
510836-1*	4.16 to 34.5 kV	LED	\$1,520.00
514500-1*	2.4 to 6.9 kV	Analog Meter	\$3,070.00
514500-2*	6.9 to 34.5 kV	Analog Meter	\$3,070.00
514500-3	34.5 to 69 kV	Analog Meter	\$3,710.00
514500-4	6.9 to 34.5 kV	Analog Meter	\$3,955.00
510900	10 to 30 kV, 50/60 Hz	LED	\$2,445.00
*Pole Included			

## Optional Accessories for DETEX

### 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

Cat. No.		Unit Price USD
512117	Pneumatic Glove Tester	\$225.00

### 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

Cat. No.		Unit Price USD
510005	Piezo Verifier, generates 1800 V	\$465.00
510006	Piezo Verifier, generates 10, 20, 30 kV	\$485.00

# TEST AND MEASUREMENT SOFTWARE

## Maintenance Test Data Management Software

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 — [www.megger.com/us](http://www.megger.com/us)

Turn to page 2  
for information on  
our insulation testers and  
page 12 for information on  
Megger ground testers

### Insulation Resistance Tests

The test forms supplied in PowerDB Lite work with the Megger MIT520/2 and MIT1020/2 insulation resistance test sets. Test results can either be downloaded from the instrument onboard memory or during the test with real time download.

### Earth/Ground Resistance Tests

Two major challenges of earth ground resistance acceptance and maintenance testing are quickly addressed in this easy-to-use software package:

- Producing professional forms showing the test method utilized in a clear and easy to read format
- Carrying out the required calculations for chosen test method. Many methods that offer real advantages are not utilized because of their complexity.



# CROSS REFERENCE GUIDE

Cat. No.	Description	Page	Cat. No.	Description	Page
1000-213	VF2 AC Voltage Detector	22	AVO300 Series	Multimeter	22
1000-740	PAT320 Portable Appliance Tester	30	BITE 2/2P	Battery Impedance Tester	29
1000-984	SCT-AXT Alien Crosstalk Adapters	26	BITE 3	Battery Impedance Tester	28
210170	Major Megger	10	BM15	5-kV Insulation Tester	11
210400	Megohmmeter	11	BT51	Milliohmmeter	19
210415	Megohmmeter	11	CFL510F	Time Domain Reflectometer	24
210600	Major Megger	10	CFL535F	Time Domain Reflectometer	24
212159	Major Megger	10	CHM2000	Telecom Cable Height Meter	31
212359	Major Megger	10	DCM300E	Leakage Clampmeter	23
212459	Major Megger	10	DCM Series	Digital Clamp Meters	23
212559	Major Megger	10	DCM330	Fork Multimeter	23
21805-3	Midget Insulation Tester (WM6)	10	DET10C	Clamp-on Ground Tester	16
220005	DC Dielectric Test Set	11	DET2/2	High Sensitivity Ground Tester	17
220015	DC Dielectric Test Set	11	DET20C	Clamp-on Ground Tester	16
230315	AC High-pot Tester	30	DET3 Series	Earth/Ground Resistance Tester	13
230415	AC High-pot Tester	30	DET4T2 Series	Earth/Ground Resistance Tester	13
230425	AC/DC High-pot Tester	30	DLRO10/10X	DLRO	18
235303	Tool and Appliance Tester	30	DLRO10HD	DLRO	18
247000 Series	General Purpose DLROs	19	DLRO200	DLRO	19
250260	3-terminal Ground Resistance Tester	12	LT300	Hi Current Loop Tester	17
280282	Coating Thickness Gauge	33	M8000 Series	Multimeters	22
510005	Piezo Verifier	35	MIT1020/2	10-kV Insulation Tester	3
510006	Piezo Verifier	35	MIT200 Series	1-kV Insulation Testers	8
510836-1	Detex Phasing Tester	34	MIT30	30-kV Insulation Tester	11
510900	Single-pole Phase Comparator	34	MIT300 Series	1-kV Insulation Testers	8
512117	Pneumatic Glove Tester	35	MIT400 Series	1-kV Insulation Testers	6
514242-X	Detex Voltage Detectors	34	MIT415	1-kV Insulation Tester	8
514360-X	Detex Voltage Detectors	34	MIT510/2	5-kV Insulation Tester	2
514440-2	Detex Voltage Detector	34	MIT520/2	5-kV Insulation Tester	2
514500-X	Detex Phasing Testers	34	MJ15	5-kV Insulation Tester	11
550005B	Single Phase TTR	27	MMC850	Multiconductor Digital Clampmeter	23
560060	Motor and Phase Rotation Tester	32	OTS60SX	Oil Test Set	27
560400	Motor and Phase Rotation Tester	32	PAT320-US	Portable Appliance Tester	30
565250	Phase Sequence/Continuity Indicator	32	PSI-700	Phase Sequence/Continuity Indicator	32
569001	Leak and Corona Detector	33	SCT Series	Structured Cable Testers	26
6111-765/766	SCT-SMA/MMA Fiber Adapters	26	TDR500	Time Domain Reflectometer	24
656601	Energized Cable Tracer	31	TDR900	Time Domain Reflectometer	24
656621	AccuTrace Cable Route Tracer	31	TTR20	Handheld TTR	27
656902	Split-box Pipe and Cable Locator	31	VF2	AC Voltage Detector	22
659600	Power Cable Height Meter	31	WM6	Midget Insulation Tester (21805-3)	10
830220-1	Cable Phasing Meter	32			

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# DISTRIBUTOR PRODUCTS RESOURCE GUIDE

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Rick Grim ..... (352) 799-6366  
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East Coast Electrical Distributor Mgr

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Rick DeBella ..... (856) 232-1172  
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## Get High Performance Testing

With the Megger DLRO10HD

### Versatile powerful validation

The DLRO Series is recognized for its versatility, its impressive power capability and the ability to offer turnkey testing solutions. Its testing performance can handle ground bond testing, routine maintenance and corroboration of protection systems.

See pages 18-19 for information