

# MEGOHMMETERS

## Widest Range of Insulation Test Instruments

### An array of Megohmmeters to choose from

AEMC® Instruments offers the widest range of insulation test instruments allowing us to have the right instrument for all your testing needs. Automated test functions and calculations eliminates errors, saves time and money. Our megohmmeters are designed to the latest safety standards. They are rugged, weather resistant, accurate, reliable and built to perform.



*Our products are backed by over 130 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.*

# Understanding Insulation Resistance Testing

## Why have an insulation testing program?

A regular insulation resistance testing program is strongly recommended to prevent electrical shocks, assure personnel safety and to eliminate shutdown time. It helps to detect deterioration of insulation in order to schedule repair work such as: vacuum cleaning, steam cleaning, drying and rewinding or testing newly installed conductors. It is also helpful when evaluating the quality of the repairs before the equipment is put back into operation.

## What causes insulation failure?

Some of the more common causes of insulation failure include: overloading conductors, excessive heat or cold, moisture, dirt, corrosive vapors, oil, vibration, aging and nicked wiring.

## What tests are used to detect insulation deterioration?

There are numerous maintenance tests for assessing insulation quality. The three tests primarily used to test motor, generator and transformer insulation are: **Polarization index, Spot reading and Step voltage.**

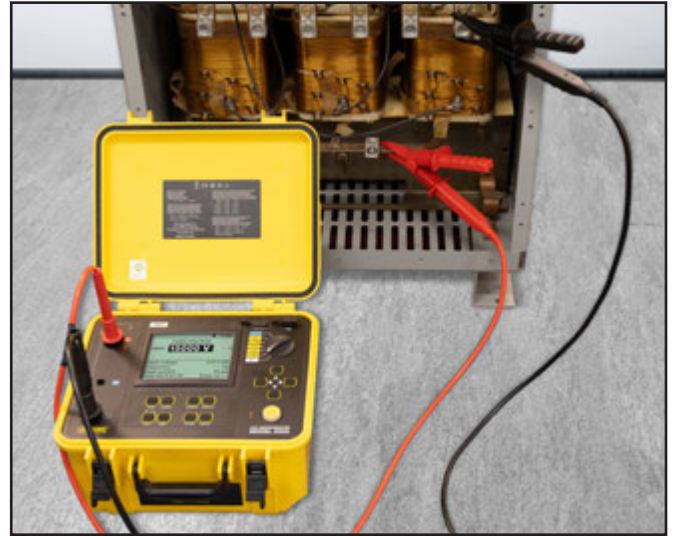
**Polarization index:** Developed for testing rotating machinery like form-wound motors and generators. This method results in a ratio of the IR value at 10-minutes divided by the 1-minute value. Rotating machinery and insulation materials that present a 1-minute reading of  $> 5000 \text{ M}\Omega$  are not recommended to be PI tested as an assessment tool by the IEEE.

**Spot reading:** The most basic method of insulation resistance testing. A test voltage is applied for a fixed amount of time and a reading is taken. Ideally, measurements should always be taken at the same temperature that is exceeding the dew point. Different temperature testing results should be manually corrected to a base reference temperature, typically  $68 \text{ }^\circ\text{F}$ , for a more complete comparison. These tests become more meaningful when performed as part of a periodic preventative maintenance program to track trends in the insulation values over time to help predict failure.

**Step voltage:** This method is looking for any reduction of insulation resistance at higher voltages. This test will create electrical stresses on internal insulation cracks that may not be revealed at lower voltages. When a test sample shows a high IR value at a lower voltage then a low value at a higher voltage, this will be an indication to investigate further the condition of the test sample. This can reveal deterioration of insulation due to aging or mechanical damage. Step voltage testing is also used as a way to dry wet cables or equipment. Gradual voltage steps, applied for increasingly longer durations, can facilitate drying through heating.

## What equipment is necessary for conducting insulation resistance tests?

- Megohmmeter with a timed test function
- Temperature indicator
- Humidity meter (*not necessary if equipment temperature is above the dew point*)



Model 6555 performing a single-phase test on a three-phase transformer.

## APPLICATIONS

- Motors (*AC and DC*), transformers, cables, switchgears and electrical wiring installations
- Test industrial commercial wiring and motor control centers
- Acceptance testing and preventative maintenance
- Domestic and industrial contracting
- Dielectric Absorption Ratio (DAR) and Polarization Index (PI) measurements
- Spot reading, high resistance or absorption tests
- Timed resistance measurements
- Low insulation test range for testing old or flooded installations
- Drying out conductors
- Continuity checks
- Cable testing (*including telecom*)
- Test transformers, heaters, relays, circuit breakers

## Four Questions for Selecting the Proper Megohmmeter

### What is the proper voltage range?

Typically 2x equipment operating voltage up to 1000 V and equal to the operating voltages above 1000 V

### What is the desired power source?

Battery, AC powered or hand-cranked

### What is the resistance range of interest?

$\text{M}\Omega$ ,  $\text{G}\Omega$ ,  $\text{T}\Omega$

### What type of display is preferred?

Analog is best for trend analysis. While digital gives the exact reading and shows trend.



# 1000 V Hand-Cranked Megohmmeter

## MODEL 6503

*Designed for acceptance testing and preventative maintenance of wiring, cables, switchgear and motors*

*Ideal for use in areas affected by floods*

MODEL	6503
<b>INSULATION TESTS</b>	
<b>Test Ranges*</b>	
250 V	(1 to 500) MΩ
500 V	(1 to 500) MΩ
1000 V	(10 to 5000) MΩ (5 GΩ)
<b>Short Circuit Current</b>	5 mA (max)
<b>Voltage Measurement / Safety Check</b>	(0 to 600) V <sub>ac</sub>
<b>Accuracy (MΩ)</b>	± 2.5 % of Full Scale Length
<b>Automatic Discharge</b>	8 s / μF
<b>SAFETY</b>	
<b>Test Voltage Indicator</b>	Green LED indicates proper test voltage and crank speed <i>(If the LED is not ON during testing, the reading is not valid)</i>
<b>Safety Rating</b>	600 V CAT II, 300 V CAT III

\*DC test voltage generated in full across the entire measurement range.  
Consult factory for NIST Calibration prices.



## PRODUCT INCLUDES

Soft carrying case, (3) color-coded (red/black/blue) leads and alligator clips, black test probe and user manual.



CAT. #	DESCRIPTION
2126.52	Megohmmeter Model 6503 (Hand-cranked, (250, 500, 1000) V



**TRUE MegOhmmeter®**

## FEATURES

- No batteries or power needed to operate
- Test voltages of (250, 500, and 1000) V
- Insulation measurements to 5000 MΩ
- LED indicates constant voltage output and proper cranked speed controlled by voltage regulator
- Automatic discharge when measurement is finished
- Auto-Ranging – dual scale operation for better sensitivity and easier readings
- Designed for harsh environments: marine, mining, heavy-duty field, industrial and military use
- Compact self-contained package; folded crank
- Voltage displayed prior to, during, and at the end of test
- Large direct reading scale

## APPLICATIONS

- Acceptance testing and preventative maintenance
- Test motors, cables, switchgears and electrical wiring installations
- Continuity checks
- Check domestic and industrial wiring

# Digital, Analog & Multifunction Hand-held Megohmmeters

## MODELS 6522 & 6526

Ideal for testing cables, small motors, pumps, transformers and industrial equipment



(6526 only)



6522



6526

MODELS	6522	6526
<b>INSULATION TESTS</b>		
Test Voltages	(250, 500, and 1000) V	(50, 100, 250, 500, and 1000) V
Insulation Resistance	40 GΩ (40,000 MΩ)	200 GΩ (200,000 MΩ)
PI / DAR Ratios	No	Yes
Test Lock		Yes
Timer		(0 to 40) min
Auto Discharge		Yes
Automatic Test Inhibit		> 25 V
<b>DMM FUNCTIONS</b>		
Voltage		700 V <sub>AC</sub> / DC
Resistance	–	1000 kΩ
Continuity	10 Ω	10 Ω, 100 Ω
Test Current		200 mA
Capacitance Measurement	–	0.1 n to 10 μF
Frequency	–	(15.3 to 800) Hz
<b>GENERAL FUNCTIONS</b>		
Alarm / Δ Rel	No / No	Yes / Yes
Auto Power OFF		Yes
Data Hold		Yes
Test Lead Compensation		Yes
Remote Probe		Yes (optional)
Memory	–	1300 measurements
Bluetooth®	–	2.1 Class II
DataView® Software	–	Included
Display Type		Digital w / Analog Bargraph
Display Counts		4000
Backlight		Yes
Power Supply		(6) AA Alkaline
Magnetic Mount		Yes
<b>SAFETY</b>		
Safety Rating		600 V CAT IV

## PRODUCT INCLUDES

**6522:** Soft carrying case, (2) 5 ft color-coded (red/black) leads, (2) color-coded (red/black) alligator clips, (1) black test probe, (6) AA batteries and user manual.

**6526:** Soft carrying case, (2) 5 ft color-coded (red/black) leads, (2) color-coded (red/black) alligator clips, (1) black test probe, (6) AA batteries, quick start guide, USB drive with DataView® software and user manual.

CAT. #	DESCRIPTION
2155.51	Megohmmeter Model 6522 (Digital w/Analog Bargraph, (250, 500, 1000) V, Continuity, V)
2155.53	Megohmmeter Model 6526 (Digital w/Analog Bargraph, Alarm, (50, 100, 250, 500, 1000) V, Ohm, Continuity, V, kΩ, Capacitance, Memory, Bluetooth® w/DataView® software)

**TRUE MegOhmmeter®**



**DataView®**  
(6526 only)

## FEATURES

- Simple to use, hand-held, compact and lightweight
- Large direct reading scale
- Voltage displayed prior to, during and at the end of test
- Spot test and timed insulation resistance measurement

## Model 6526

- General purpose multimeter functions including voltage, frequency, resistance, continuity and capacitance (Model 6526)
- PI and DAR ratios calculated to determine the quality of the insulation independent of ambient temperature (Model 6526)
- Δ REL function enables measurement of the difference between a reference value and new measured value (Model 6526)
- Data storage allows comparison of results with previous test and report generation (Model 6526)
- Alarms with Pass/Fail (Green/Red) indicator light (Model 6526)
- DataView® software for configuration, analysis and reporting (Model 6526)

# Digital, Analog & Multifunction Hand-held Megohmmeters

## MODELS 6534 & 6536

**6534:** Ideal for insulation measurements on communication cables, ethernet cables and other low voltage DC wiring

**6536:** Ideal for special applications in the aerospace and defense sectors and for ESD testing where specific test voltages are required



(6534 only)



6534

6536

MODELS	6534	6536
<b>INSULATION TESTS</b>		
Test Voltages	(10, 25, 100, 250, and 500) V	Variable (10 to 100) V (1 V steps)
Insulation Resistance	50 GΩ (50,000 MΩ)	20 GΩ (20,000 MΩ)
PI / DAR Ratios		No
Test Lock		Yes
Timer		(0 to 40) min
Auto Discharge		Yes
Automatic Test Inhibit		> 25 V
<b>DMM FUNCTIONS</b>		
Voltage		700 V <sub>AC</sub> / DC
Resistance		1000 kΩ
Continuity		10 Ω, 100 Ω
Test Current		200 mA
Capacitance Measurement		–
Frequency		–
<b>GENERAL FUNCTIONS</b>		
Alarm / Δ Rel		Yes / Yes
Auto Power OFF		Yes
Data Hold		Yes
Test Lead Compensation		Yes
Remote Probe		Yes (optional)
Memory	1300 measurements	–
Bluetooth®	2.1 Class II	–
DataView® Software	Included	–
Display Type		Digital w / Analog Bargraph
Display Counts		4000
Backlight		Yes
Power Supply		(6) AA Alkaline
Magnetic Mount		Yes
<b>SAFETY</b>		
Safety Rating		600 V CAT IV

## PRODUCT INCLUDES

**6534:** Soft carrying case, (2) 5 ft color-coded (red/black) leads, (2) color-coded (red/black) alligator clips, (1) black test probe, (2) color-coded (red/black) grip probes, (6) AA batteries, quick start guide, USB drive with DataView® software and user manual.

**6536:** Soft carrying case, (2) 5 ft color-coded (red/black) leads, (2) color-coded (red/black) alligator clips, (1) black test probe, (2) color-coded (red/black) grip probes, (6) AA batteries, and user manual.

**6536 ESD FLOOR KIT :** Field case, (2) 5 ft color-coded (red/black) leads, (2) color-coded (red/black) alligator clips, (1) black test probe, (2) color-coded (red/black) grip probes, (2) 5 lb weights with conductive rubber bottom pad, (2) 4 mm non-insulated adapters, (6) AA batteries, and user manual.



**DataView®**  
(6534 only)

**TRUE MegOhmmeter®**

## FEATURES

- Simple to use, hand-held, compact and lightweight
- Test voltage from (10 to 500) V (Model dependent)
- Insulation resistance up to 50 GΩ (Model dependent)
- ΔREL function enables measurement of the difference between a reference value and new measured value
- General purpose multimeter functions including voltage, resistance & continuity
- Covers the specific requirements which require a low test voltage and strict adherence to testing procedures (Model 6536)
- Ideal for insulation measurements on communication cables, ethernet cables and other low voltage DC wiring (Model 6534)
- Automatic discharge after test
- Auto Standby Feature due to inactivity saves battery power
- Test lead resistance compensation for accurate low resistance measurements

CAT. #	DESCRIPTION
2155.55	Megohmmeter Model 6534 (Digital w/Analog Bargraph, Alarm, (10, 25, 100, 250, and 500) V, Ohm, Continuity, V, kΩ, Memory, Bluetooth® w/DataView® software)
2155.56	Megohmmeter Model 6536 (Digital w/Analog Bargraph, Alarm, Variable (10 to 100) V, Ohm, Continuity, V, kΩ)
2155.57	Megohmmeter Model 6536 ESD Floor Kit (Meter, set of (2) 5 lb weights and carrying case)



# Digital, Analog & Multifunction Hand-held Megohmmeters

## TOP PANEL



## FRONT PANEL

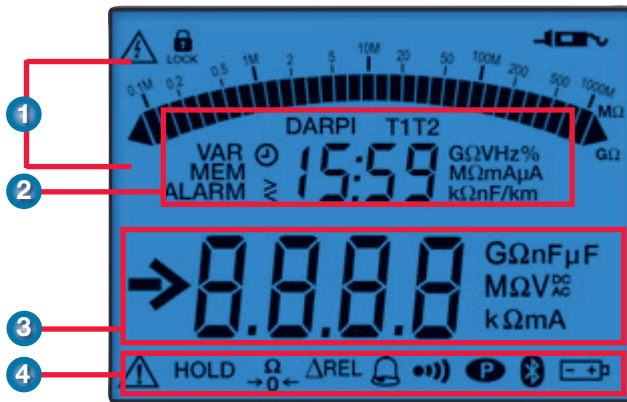


*Note: Buttons & Functions are Model Dependent*

BUTTON	FUNCTION
	Select the LOCK, TIMER, PI or DAR functions
	Switch the display back lighting ON/OFF
<b>HOLD</b>	Freeze/unfreeze the measurement display
<b>SET--UP</b>	Configure user programmable functions
<b>→ 0 ←</b>	Eliminate test lead resistance from continuity measurement
	Models 6526, 6534 and 6536: the ALARM button is used to activate/deactivate the alarms. Model 6526: the ALARM button also has a two-color (green/red) indicator to indicate Pass/Fail conditions
	Select test time, voltage or test current results to show on the secondary display: <ul style="list-style-type: none"> <li>• Program test duration for insulation measurements</li> <li>• Choose (20 or 200) mA continuity test current</li> <li>• Program alarm thresholds for (Models 6526 and 6534)</li> </ul>
<b><math>\Delta</math>REL</b>	$\Delta$ REL button is used to display the measurement from which a stored reference measurement is subtracted (Models 6526, 6534 and 6536)
<b>MEM</b>	MEM button is used to store measurements (Models 6526 and 6534)
<b>CLR</b>	CLR button is used to erase stored measurements (Models 6526 and 6534)
	Activate/deactivate Bluetooth® wireless communication (Models 6526 and 6534)

# Digital, Analog & Multifunction Hand-held Megohmmeters

## FUNCTIONAL DISPLAY



- 1 Bargraph display of insulation measurement
- 2 Secondary display
- 3 Main display
- 4 Function indicators

## HOW TO CHOOSE THE RIGHT MEGOHMMETER FOR YOUR APPLICATION NEEDS



MODELS	6522	6526	6534	6536
Applications	Industrial Maintenance		Electronics / ESD	Special / ESD
Test voltage	(250, 500, and 1000) V	(50, 100, 250, 500, and 1000) V	(10, 25, 100, 250, and 500) V	(10 to 100) V 1 V increments
Range	40 GΩ	200 GΩ	50 GΩ	20 GΩ
Leakage Current	-	✓	✓	✓
Manual / Lock / Duration Modes	✓	✓	✓	✓
PI / DAR Ratios	-	✓	-	-
Alarms	-	✓	✓	✓
ΔREL	-	✓	✓	✓
Continuity	✓	✓	✓	✓
Voltage	✓	✓	✓	✓
Frequency	-	✓	-	-
Resistance	-	✓	✓	✓
Capacitance	-	✓	-	-
Magnetic Mounting	-	✓	✓	✓
Data Storage	-	✓	✓	-
Bluetooth® Communication	-	✓	✓	-
Remote Probe Compatible	✓	✓	✓	✓
Categories	600 V CAT IV			
Display	Dual Line with Bargraph			

# 1000 V Digital & Multifunction Hand-held Megohmmeter

## MODEL 6529

*Insulation tester ideal for maintenance and repair operations on electrical equipment such as motors, cables, and more*



(with leads connected)

MODEL		6529
<b>AC/DC VOLTAGE MEASUREMENT</b>		
Range	700 V <sub>AC</sub> , 700 V <sub>AC+DC</sub>	
Accuracy	DC AC+DC	$\pm (1\% R + 1 \text{ ct})$ $\pm (1.2\% R + 1 \text{ ct})$
Resolution	1 V	
Frequency Range	DC & (30 to 440) Hz	
Input Impedance	25 M $\Omega$	
<b>INSULATION MEASUREMENT</b>		
Test Voltage / Resistance Range		
50 V	(0.010 to 420.0) M $\Omega$	
100 V	(0.020 to 420.0) M $\Omega$	
250 V	(0.050 to 4200) M $\Omega$	
500 V	(0.100 to 4200) M $\Omega$	
1000 V	0.20 M $\Omega$ to 11.00 G $\Omega$	
Measurement Accuracy		
40 $\Omega$ / 40 M $\Omega$ / 400 M $\Omega$	$\pm (1.5\% R + 10 \text{ cts})$	
4.2 G $\Omega$	$\pm (4\% R + 10 \text{ cts})$	
11 G $\Omega$	$\pm (10\% R + 10 \text{ cts})$ (1000 V range)	
<b>CONTINUITY MEASUREMENT</b>		
Range	(0 to 40) $\Omega$ (200 mA test current $\leq 2 \Omega$ )	
Accuracy	1.2% R + 3 cts	
Resolution Max	0.01 $\Omega$	
Leads Compensation	Up to 5 $\Omega$	
Threshold	Audible signal triggered, Selectable $\leq (1 \text{ or } 2) \Omega$	
<b>RESISTANCE MEASUREMENT</b>		
Range	(0 to 400) k $\Omega$ (Auto ranging)	
Accuracy	$\pm (1.2 R + 3 \text{ cts})$	
Resolution Max	0.1 $\Omega$	
DMR Mode	Compares successive measurements to a reference value with alarm indication and red backlit display if deviation changes by the programmed %. The difference between the new reading and the reference measurement, along with the % deviation is displayed.	
<b>GENERAL</b>		
Timed Test	1 s to 39.59 min selectable	
Display	LCD with backlight	
Power Supply	(6) AA alkaline batteries (NEDA 15 A or IEC LR6)	
Battery Life (5 s ON, 25 s OFF)	> 2000 measurement in M $\Omega$ , > 300 h in V <sub>AC</sub> / DC, > 6000 measurement in Continuity Test	
Dimensions	(8.54 x 3.54 x 2.44) in (217 x 90 x 62) mm	
Weight	1.68 lb (762 g)	
Operating Temperature	(14 to 122) °F (-10 to 50) °C, 90 % RH	
<b>SAFETY</b>		
Safety Rating	600 V CAT IV	

Consult factory for NIST Calibration prices.



## PRODUCTS INCLUDE

Includes soft carrying case, set of (2) 5 ft color-coded (red/black) silicone leads and alligator clips, (2) color-coded (red/black) test probes (Rated 1000 V CAT IV, UL V2), (6) 1.5 V AA batteries and user manual.

**TRUE MegOhmmeter®**



## FEATURES

- True Megohmmeter®
- Lightweight, compact, rugged and easy to handle
- Selectable test voltages (50, 100, 250, 500 and 1000) V
- Basic DMM functions; Volts, Continuity, Resistance
- DAR and PI ratio test functions
- Dual line display to view the insulation value and real-time test voltage simultaneously in an easy-to-read format
- Intuitive Pass/Fail indication
- Automatic test inhibit
- 2-color backlighting easily shows alarm conditions
- Shockproof sheath for excellent handling
- Automatic power-off function to optimize the battery life
- Programmable alarm thresholds

## ACCESSORIES/REPLACEMENTS

### CAT. #2138.54

Continuity probe

### CAT. #2119.02

Soft carrying pouch

### CAT. #2971.04

Fuse – Set of (2) FF, 200 mA, 1000 V, 10 kA, (6 x 32) mm

### CAT. #5000.94

Lead – Set of (2) 5 ft color-coded (red/black) silicone leads with 4 mm straight/right angle banana plugs (Rated 1000 V CAT IV, UL)

### CAT. #5000.97/#5000.98

Black/Red test probe (1000 V CAT IV, 15 A, UL V2)

### CAT. #5000.99/#5100.00

Clip – Safety alligator (red/black) (1000 V CAT IV, 15 A, UL V2)



CAT. #	DESCRIPTION
2126.55	Megohmmeter Model 6529 (Digital, (50, 100, 250, 500) V, 1 kV, 420 k-Ohm, Continuity, Alarm, Timer & PI/DAR)





# 1000 V Digital & Multifunction Hand-held Megohmmeter

The 6529 is a True Megohmmeter® in compliance with IEC 61010 and designed with features and functions for use in the field: lightweight, compact, rugged and easy to handle, even when wearing gloves. Its construction and interface are intended to simplify its use. Its functions as both an insulation tester and a basic multimeter. An intuitive Pass/Fail indication offering a blue/red backlight makes it very easy to identify defective conditions. The DMR function (*unique to AEMC® Instruments*) provides the capability to compare measurements to a known reference quickly recognizing potential problems. Multimeter functions include AC/DC voltage, resistance and continuity.



## SCREEN DISPLAYS

### Megohmmeter and Resistance Modes

Insulation Test Voltage and Resistance Measurement



Resistance Measurement



### Megohmmeter Ratio Modes

DAR and PI measurements are selected by successive presses of the SET UP button until PI or DAR appear in the upper display

DAR Test Time Measurement  
Default measurements are at 30 seconds and 1 minute



PI Test Time Measurement  
Default measurements are at 1 minute and 10 minutes



### Continuity Mode

Continuity Measurement and Test Current  Indicates Pass Condition



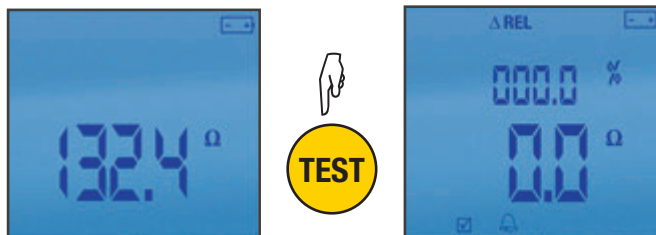
Continuity Measurement and Test Current Red Backlight and X indicates Alarm (Fail) Condition



## DIFFERENTIAL MODE RESISTANCE (DMR)

The DMR mode or relative mode, is typically used for the purpose of checking that all resistances of a given installation or run (*batch*) are within the allowed tolerance which is set by a user programmable percentage.

1. Start by setting the threshold %
2. Make the first measurement and press the **TEST** button to record it.  
This will be the reference measurement.



3. At each new measurement, the instrument indicates the difference between the new reading and the reference measurement, along with the difference in %.



If the difference is below the programmed threshold, the  symbol is displayed.



If the difference exceeds the programmed threshold, the **X** symbol is displayed and the backlight turns red.

# 1000 V Digital Portable Hand-held Megohmmeter

## MODEL 6527

*Insulation tester with DMM functions specially designed for testing wiring, small motors and other equipment*



MODEL	6527			
Range	4 MΩ	40 MΩ	400 MΩ	4000 MΩ (4 GΩ)
<b>INSULATION TESTS (250 V)</b>				
Resolution	0.001 MΩ	0.01 MΩ	0.1 MΩ	1 MΩ
Accuracy	± 2 % of Reading ± 10 cts		± 3 % of Reading ± 5 cts	± 4 % of Reading ± 5 cts
Test Current	1 mA test current into a 250 kΩ load			
<b>INSULATION TESTS (500 V)</b>				
Resolution	0.001 MΩ	0.01 MΩ	0.1 MΩ	1 MΩ
Accuracy	± 2 % of Reading ± 10 cts		± 2 % of Reading ± 5 cts	± 4 % of Reading ± 5 cts
Test Current	1 mA test current into a 500 kΩ load			
<b>INSULATION TESTS (1000 V)</b>				
Resolution	0.001 MΩ	0.01 MΩ	0.1 MΩ	1 MΩ
Accuracy	± 3 % of Reading ± 10 cts	± 2 % of Reading ± 10 cts	± 3 % of Reading ± 5 cts	± 4 % of Reading ± 5 cts
Test Current	1 mA test current into a 1 MΩ load			
<b>VOLTMETER RANGES (250, 500, &amp; 1000) V</b>				
V AC / DC	600 V		1000 V	
Resolution	1 V			
Accuracy	DC	± 0.8 % of Reading ± 3 cts		
	AC	± 1.2 % of Reading ± 10 cts		
Input Impedance	DC	10 MΩ		
	AC	10 MΩ (40 / 400) Hz		
<b>RESISTANCE TESTS - OHMMETER</b>				
Range	(0 to 400) kΩ			
Resolution	0.1 kΩ			
Accuracy	± 1.2 % of Reading ± 3 cts			
<b>CONTINUITY TESTS</b>				
Range	(0 to 40) Ω	(0 to 400) Ω		
Resolution	0.01 Ω	0.1 Ω		
Accuracy	1.2 % ± 3 cts			
Test Current	> 200 mA (0.2 / 2) Ω			
Test Lead Compensation	Yes: Dedicated push-button			
Beeper	Yes: < 35 Ω ± 3 Ω			
<b>ELECTRICAL</b>				
Power Supply	(6) 1.5 V AA batteries – Alkaline recommended (included)			
<b>MECHANICAL</b>				
Dimensions	(7.9 x 3.6 x 2.0) in (200 x 92 x 50) mm			
Weight	24 oz (700 g)			
<b>SAFETY</b>				
Safety Rating	600 V CAT IV			

Consult factory for NIST Calibration prices.

## PRODUCT INCLUDES

Soft carrying case, set of (2) 5 ft color-coded test leads with alligator clips, (1) black test probe and user manual.



**TRUE MegOhmmeter®**

## FEATURES

- Insulation test voltage selections of (250, 500, and 1000) V
- Measure insulation to 4000 MΩ (4 GΩ)
- TEST LOCK feature for time sensitive measurements up to 15 minutes
- Auto discharge after insulation test
- AC/DC voltmeter to 600 Vac/1000 Vdc
- Ohmmeter to 400 kΩ
- Continuity meter with > 200 mA test current
- Test lead resistance compensation for accurate low resistance measurements
- Auto HOLD function to pause readings
- Large and bright dual display with blue backlight
- Auto Power OFF feature
- Ergonomic case with back-stand

CAT. #	DESCRIPTION
2126.53	Megohmmeter Model 6527 (Digital (250, 500, 1000) V, Continuity, 400 kΩ, V)

# 1000 V Digital/Analog Megohmmeter

## MODEL 1060

Test insulation on cables, transformers, motors and wiring installations



DataView®

TRUE MegOhmmeter®



MODEL	1060	
<b>INSULATION TESTS</b>		
Test Voltage	50 V	2 kΩ to 200 GΩ
	100 V	4 kΩ to 400 GΩ
	250 V	10 kΩ to 1000 GΩ (1 TΩ)
	500 V	20 kΩ to 2000 GΩ (2 TΩ)
	1000 V	40 kΩ to 4000 GΩ (4 TΩ)
Accuracy	2 kΩ to 40 GΩ	± 5 % of Reading ± 3 cts
	40 GΩ to 4 TΩ	± 15 % of Reading ± 10 cts
Voltage Test / Safety Check	(0 to 1000) V <sub>AC</sub> / DC	
Voltage Warning Indicator	> 25 V	
Test Inhibition	Yes > 35 V <sub>DC</sub>	
Smooth Function	Yes	
<b>RESISTANCE TESTS</b>		
Measurement Range	0.01 Ω to 400 kΩ	
Test Voltage	12.4 V <sub>DC</sub> (max)	
Test Current	< 6 mA <sub>DC</sub>	
Accuracy	± 3 % of Reading ± 3 cts	
<b>CONTINUITY TESTS</b>		
Measurement Range	(0.01 to 39.99) Ω	
Test Current	≥ 200 mA from (0.01 to 20.00) Ω	
Accuracy	± 3 % of Reading ± 4 cts	
<b>MEMORY</b>		
Memory of Reading over Time R(t)	Yes (128 kB memory)	
Memory of Test Results	1500 Insulation Resistance measurements or 4000 Resistance/Continuity tests	
<b>COMMUNICATION</b>		
Communication Port	RS-232 to USB adapter (included)	
PC Software / Report Generation	DataView® (included)	
<b>ELECTRICAL</b>		
Power Supply	9.6 V NiMH Battery Pack (included) (85 to 256) V (50 / 60) Hz	
<b>MECHANICAL</b>		
Weight	7.5 lb (3.4) kg	
Dimensions	(9.45 x 7.28 x 4.33) in (240 x 185 x 110) mm	
<b>SAFETY</b>		
Safety Rating	600 V CAT III	

Consult factory for NIST Calibration prices.

## PRODUCT INCLUDES

Detachable accessory pouch, (2) 5 ft color-coded (red/blue) leads, (1) black shielded lead, (3) color-coded (red/black/blue) alligator clips, (1) black test probe, (1) 5 ft USB A-B cable, US 115 V power cord, rechargeable NiMH battery, spare fuses, and a USB drive with DataView® software and user manual.



## ACCESSORIES

CAT. #2155.75  
Remote test probe  
(600 V CAT IV)



## FEATURES

- Test voltage selections of (50, 100, 250, 500 and 1000) V
- Insulation measurements to 4000 GΩ (4 TΩ)
- Direct measurement of DAR and PI values
- Direct measurement of sample capacitance
- Display of test voltage and run time
- Fully programmable and controllable on a PC
- Programmable test run times and PI times
- Smooth and Alarm functions
- Automatic test inhibition (if live sample > 25 V)
- Automatic discharge and display of discharge voltage
- Large dual display with time, voltage and measurement
- Bright blue electroluminescent backlight
- Auto Power OFF when not in use
- Extensive memory function to store results in files specific to a sample
- DataView® displays report generated results and graphs
- Remote operation with optional test probe
- Rugged, dual wall, water-resistant field case with detachable lead/accessory pouch

CAT. #	DESCRIPTION
2130.03	Megohmmeter Model 1060 (Digital, with Analog Bargraph, Backlight, Alarm, Timer, (50, 100, 250, 500, 1000) V, Auto DAR/PI, Resistance, Continuity, DataView® software, 128 kB Memory)





# 5000 V Digital, Analog & Graphical Megohmmeters

## MODELS 5050, 5060 & 5070

*Ideal for large motors, generators, transformers, and more. AC/battery powered, GΩ/TΩ measurement range, and multifunction capability for comprehensive testing.*

Models 5050, 5060 and 5070, the latest design in 5000 V Megohmmeters. The features and functions incorporated in this product family are the results of many years of analyzing how megohmmeters are used in everyday applications. The most advanced technology available has been applied to automate and facilitate the testing process for these applications.

Many features incorporated in the Models 5050, 5060 and 5070 include automatic calculation and presentation of the Dielectric Absorption Ratio (DAR), Polarization Index (PI) and Dielectric Discharge (DD). The PI ratio times are also user defined. The Model 5070 is the only megohmmeter to offer both a graphical plot of the test right on the instrument, as well as a digital presentation of the test results, along with the ability to program up to three step voltage profiles, each containing up to five steps.

These megohmmeters are designed with the highest level of safety features built in. All units are packaged in a rugged insulated case. They incorporate test inhibit capabilities which will not allow test voltages to be generated if a live sample is detected. The test terminals are recessed to ensure operating safety. The test leads, rated for 5000 V for both testing and measurement, are the only truly safety approved 5000 V leads on the market today. All three models can be operated from an internal rechargeable battery system or from AC line power.



**TRUE MegOhmmeter®**

**DataView®**  
(5060 & 5070)

## APPLICATIONS

- Test insulation on cables, transformers, motors, generators, insulators and wiring installations
- High resistance or absorption tests
- Spot reading tests
- Timed resistance measurements
- Dielectric Absorption Ratio (DAR) and Polarization Index (PI) tests
- Multi-layer insulation testing (*Dielectric Discharge*)
- Test old or water damaged installations over long time runs
- Motor insulation resistance measurements
- Programmable alarm settings
- Predictive maintenance by storing results in PC for trend analysis (*Model dependent*)
- User selectable voltage testing to provide application specific testing

CAT. #	DESCRIPTION
2130.20	Megohmmeter Model 5050 (Digital, Analog Bargraph, Backlight, Alarm, Timer, (500, 1000, 2500, 5000) V, Auto DAR/PI/DD)
2130.21	Megohmmeter Model 5060 (Digital, Analog Bargraph, Backlight, Alarm, Timer, (500, 1000, 2500, 5000) V, Auto DAR/PI/DD, USB w/DataView® Software)
2130.30	Megohmmeter Model 5070 (Graphical, Analog Bargraph, Backlight, Alarm, Timer, (500, 1000, 2500, 5000) V, StepV, Auto DAR/PI/DD, USB with DataView® software)

# 5000 V Digital, Analog & Graphical Megohmmeters



## FEATURES

- Test voltage combinations of (500, 1000, 2500 and 5000) V
- Insulation measurements from 10 kΩ to 10,000 GΩ (10 TΩ)
- Selectable and programmable test voltage (40 to 5100) V
- Automatic calculation of DAR, PI and DD ratios
- Direct measurement and display of Capacitance and Leakage Current
- Display resistance, test voltage and run time
- Programmable test run times and PI ratio times
- Smooth and Alarm functions
- Automatic test inhibition
- Automatic discharge and display of discharge voltage
- Large dual-display with time, voltage and measurements shown (*Models 5050 and 5060*)
- Graphic and digital display of test voltage, resistance and more (*Model 5070*)
- Bright blue electroluminescent backlight
- Programmable test voltage lock-out
- Programmable alarm setting
- Auto power-down when not in use
- AC or DC powered with rechargeable NiMH batteries
- Rugged, weatherproof field case
- Includes DataView® software for data retrieval, real-time display, analysis and report generation (*Models 5060 and 5070*)
- Designed and built to IEC safety standards

MODELS		5050	5060	5070
<b>INSULATION TESTS</b>				
<b>Test Voltage</b>	<b>500 V</b>	10 kΩ to 2000 GΩ (2 TΩ)		
	<b>1000 V</b>	10 kΩ to 4000 GΩ (4 TΩ)		
	<b>2500 V</b>	10 kΩ to 10,000 GΩ (10 TΩ)		
	<b>5000 V</b>	10 kΩ to 10,000 GΩ (10 TΩ)		
<b>User Selectable Test Voltage</b>	Programmable: (40 to 1000) V: 10 V increments; (1000 to 5100) V: 100 V increments			
<b>Accuracy</b>	<b>10 kΩ to 399.9 GΩ</b> <b>400 GΩ to 10 TΩ</b>	± 5 % of Reading ± 3 cts ± 15 % of Reading ± 10 cts		
<b>Voltage Test / Safety Check</b>	2500 V <sub>AC</sub> / 4000 V <sub>DC</sub>			
<b>Voltage Warning Indicator</b>	Yes > 25 V			
<b>Test Inhibition</b>	Yes – selectable at (3, 10, or 20) % of test voltage			
<b>Smooth Function (user selectable)</b>	Digital filtering stabilizes display readings			
<b>MEMORY</b>				
<b>Storage of Readings over Time R(t)</b>	4 kB memory		128 kB memory	
<b>Storage of Test Results</b>	20 readings		1500 readings	
<b>COMMUNICATION</b>				
<b>Communication Port</b>	–		Serial and RS-232 to USB adapter ( <i>included</i> )	
<b>PC Software / Report Generation</b>	–		DataView® ( <i>included</i> )	
<b>ELECTRICAL</b>				
<b>Power Supply</b>	(1) 9.6 V NiMH battery pack ( <i>included</i> ) Line power: (85 to 256) V (50 / 60) Hz			
<b>MECHANICAL</b>				
<b>Dimensions</b>	(10.63 x 9.84 x 7.09) in (270 x 250 x 180) mm			
<b>Weight</b>	9.5 lb (4.3 kg)			
<b>SAFETY</b>				
<b>Safety Rating</b>	1000 V CAT III			



Consult factory for NIST Calibration prices.

## PRODUCT INCLUDES

### 5050, 5060 & 5070

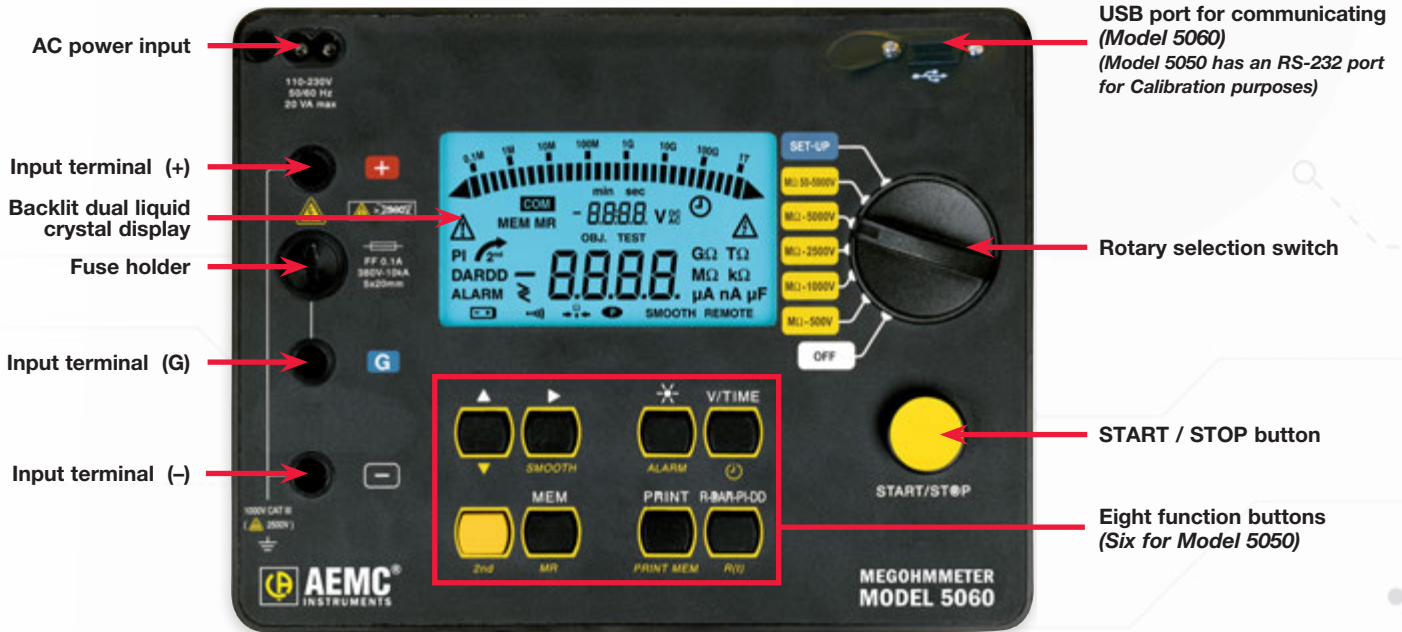
Extra large classic tool bag, set of (3) 10 ft (5 kV) safety leads (red/black/blue) with clips, one guard terminal jumper lead (blue), US 115 V power cord, rechargeable battery pack, and user manual (*Model 5050*)



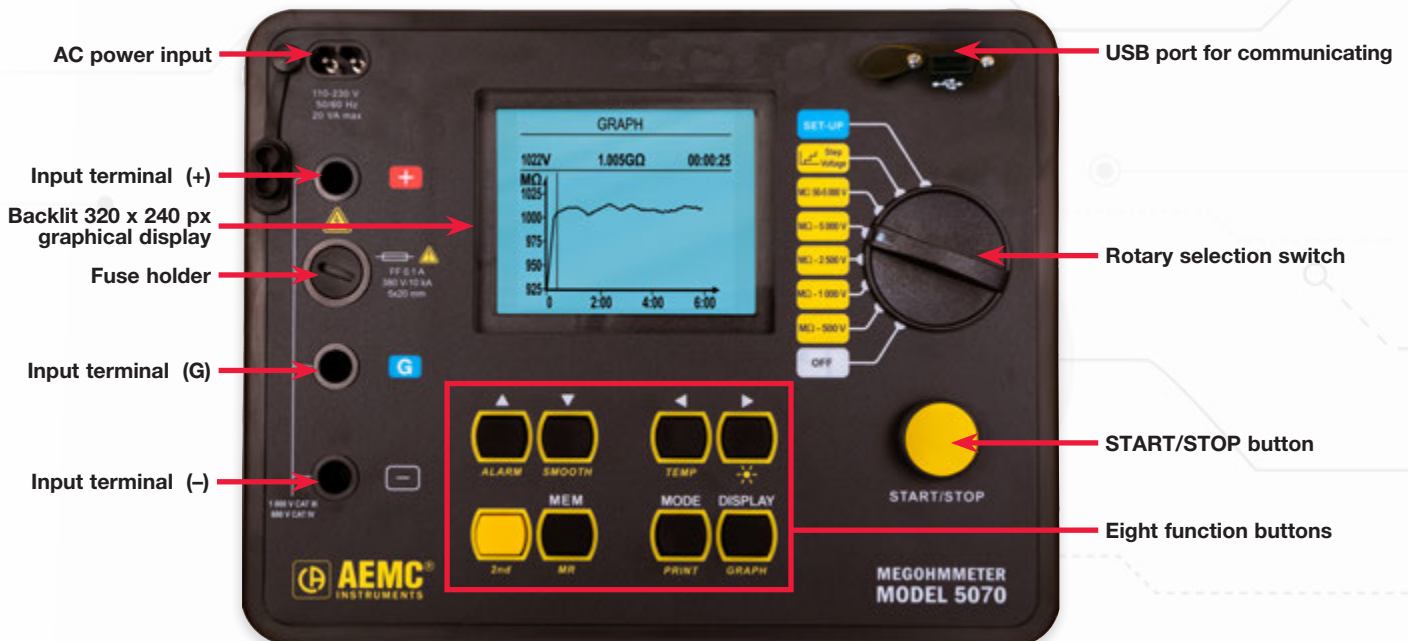
# 5000 V Digital, Analog & Graphical Megohmmeters

## FUNCTIONAL DISPLAY

### MODELS 5050 & 5060



### MODEL 5070





# 5000 V Digital, Analog & Graphical Megohmmeters

## MODEL 6505

*Contributes to the safety of electrical installations and equipment*



**TRUE MegOhmmeter®**

MODEL	6505
<b>INSULATION TESTS</b>	
<b>Test Voltage / Range</b>	
500 V	10 kΩ to 2000 GΩ (2 TΩ)
1000 V	10 kΩ to 4000 GΩ (4 TΩ)
2500 V	10 kΩ to 10,000 GΩ (10 TΩ)
5000 V	10 kΩ to 10,000 GΩ (10 TΩ)
<b>User Programmable Test</b>	(40 to 1000) V: 10 V increments (1000 to 5100) V: 100 V increments
<b>Short Circuit Current</b>	< 1.6 mA ± 5 %
<b>Accuracy</b>	
10 kΩ to 399.9 GΩ	± 5 % of Reading ± 3 cts
400 GΩ to 10 TΩ	± 15 % of Reading ± 10 cts
<b>DAR (1 min / 30 s)</b>	0.02 to 50.00
<b>PI (10 min / 1 min &amp; User Programmable)</b>	0.02 to 50.00
<b>Capacitance Measurement</b>	(0.001 to 49.99) μF; Max resolution 1 nF
<b>Leakage Current Measurement</b>	0.00 nA to 3 mA; Max resolution 1 pA
<b>Programmable PI Ratio Times</b>	(1 to 60) min
<b>Discharge After Test</b>	Yes, automatic
<b>Discharge Voltage Display</b>	Yes
<b>Voltage Test / Safety Check</b>	2500 V <sub>AC</sub> / 4000 V <sub>DC</sub> (16 to 42) Hz / 1 V Resolution
<b>Voltage Warning Indicator</b>	Yes > 25 V
<b>Test Inhibition</b>	> 40 % of test voltage
<b>Guard Terminal</b>	Yes
<b>ELECTRICAL</b>	
<b>Power Supply</b>	(1) 9.6 V NiMH battery pack (included); Line power: (85 to 256) V <sub>AC</sub> (50 / 60) Hz
<b>MECHANICAL</b>	
<b>Dimensions</b>	(10.63 x 9.84 x 7.09) in (270 x 250 x 180) mm
<b>Weight</b>	9.5 lb (4.3 kg)
<b>SAFETY</b>	
<b>Safety Rating</b>	1000 V CAT III

Consult factory for NIST Calibration prices.

## PRODUCT INCLUDES

Extra large classic tool bag, set of (3) 10 ft color-coded (red/black/blue) leads with clips (5000 V) (red/black/blue), (1) blue guard terminal jumper lead, fuse 0.1 A 380 V, rechargeable battery pack (installed), US 115 V power cord, and user manual.



## FEATURES

- True Megohmmeter®
- Simple operation
- Test inhibition if terminal voltage > 40 % of test voltage
- Test voltage selections of (500, 1000, 2500 and 5000) V
- Insulation measurements from 10 kΩ to 10,000 GΩ (10 TΩ)
- Adjustable and programmable test voltage (40 to 5100) V
- Automatic calculation of DAR and PI values
- Direct measurement and display of capacitance and leakage current
- Display resistance, test voltage and run time
- Programmable PI ratio times
- Automatic test inhibition (if live sample > 40 % of test voltage)
- Automatic discharge and display of discharge voltage
- Large backlight LCD dual-display with time, voltage and measurements shown
- Portable, rugged, dual wall, water-resistant field case
- Designed and built to IEC safety standards
- Operates on battery or line power

## ACCESSORIES/REPLACEMENTS

- CAT. #2133.73** Extra Large Tool Bag
- CAT. #2960.21** 9.6 V rechargeable NiMH battery pack
- CAT. #2151.30** Lead – Replacement set of (3), 10 ft (5 kV) w/ integral clips
- CAT. #2151.31** Lead – Replacement 1 ft (5 kV) blue jumper lead
- CAT. #2151.32** Lead – Set of (3), 25 ft (5 kV) w/ integral clips
- CAT. #2151.33** Lead – Set of (3), 45 ft (5 kV) w/ integral clips
- CAT. #2119.84** Fuse – Set of (3), 0.1 A, 380 V, 5 x 20, 10 kA
- CAT. #5000.14** Power Cord 115 V US Plug

CAT. #	DESCRIPTION
2130.18	Megohmmeter Model 6505 (Digital, with Analog Bargraph, Backlight, (500, 1000, 2500, 5000) V, Auto DAR/PI)

# 10,000 V/15,000 V Digital Megohmmeters

## MODELS 6550 & 6555

**Expert tools for testing insulation safely and accurately  
ideal for use on rotating machinery, transformers and  
cables operating at higher voltages**

The Megohmmeter Models 6550 and 6555 are the right tools for testing insulation safely and accurately, and are ideal for use on rotating equipment and machinery operating at 10 kV or higher. They are fully automated 10,000 V and 15,000 V graphical insulation testers. They provide insulation measurements up to 29,000 G $\Omega$  (29 T $\Omega$ ), (model dependent). Test results include DAR, PI, DD,  $\Delta R$ , Capacitance, Leakage Current, as well as programmable temperature correction of resistance readings.

The Models 6550 & 6555 also offer the ability to program up to three step voltage profiles from 40 V to (10 or 15) kV (model dependent), each containing up to ten steps. They also include three ramp profiles and three programmable test voltages in addition to the standard fixed voltages of (500, 1000, 2500, 5000, 10,000 and 15,000) V. These units have a USB interface and a data storage function, which permits storage of test results in files specific to the device under test. The included DataView<sup>®</sup> software runs tests directly from a PC and creates data analysis reports.



## PRODUCT INCLUDES

Small classic tool bag, set of (3) 10 ft color-coded (red/blue/black) safety leads with clips (3000 V CAT III), (1) 15 kV jumper lead (blue), optical USB cable, 115 V US power cord, 9.6 V rechargeable NiMH batteries, and a USB drive with DataView<sup>®</sup> software and user manual.



**TRUE MegOhmmeter<sup>®</sup>**



## FEATURES

- True Megohmmeter<sup>®</sup>
- Fixed or programmable test voltage from 40 V to (10/15) kV
- Wide measurement range from 10 k $\Omega$  to 30 T $\Omega$
- 5 mA short circuit current
- Step and Ramp voltage testing
- Automatic calculation of DAR/PI/DD / $\Delta R$  (ppm/V) ratios
- Large, backlit graphical LCD screen with digital display, bargraph and R(t)+V(t), I(t) and I(V) graphs
- Multiple test modes: voltage ramp and step with Burn-In, Early-Break and I-Limit modes
- Three filter settings to optimize measurement stability
- Calculation of R at a reference temperature
- Storage of 80,000 measurements
- Includes DataView<sup>®</sup> software for data retrieval, real-time display, analysis and report generation
- Optically-isolated USB communication for transfer onto PC and report generation with DataView<sup>®</sup> software

# 10,000 V/15,000 V Digital Megohmmeters

MODELS	6550	6555
<b>INSULATION TESTS</b>		
<b>Test Voltage</b>		
500 V	10 kΩ to 2000 GΩ (2 TΩ)	
1000 V	10 kΩ to 4000 GΩ (4 TΩ)	
2500 V	10 kΩ to 10,000 GΩ (10 TΩ)	
5000 V	10 kΩ to 15,000 GΩ (15 TΩ)	
10,000 V	10 kΩ to 25,000 GΩ (25 TΩ)	
15,000 V	—	10 kΩ to 29,000 GΩ (29 TΩ)
<b>Fixed Test Voltages</b>	(500, 1000, 2500, 5000, and 10,000) V	(500, 1000, 2500, 5000, 10,000, and 15,000) V
<b>Variable Voltages</b>	Variable: 40 V to 10 KV with three user programmable voltage schemes	Variable: 40 V to 15 KV with three user programmable voltage schemes
<b>Ramp Mode</b>	Programmable ramps: start voltage / end voltage / duration	
<b>Ramp Configuration Range</b>	(40 to 1100) V / (500 to 10,000) V	(40 to 1100) V / (500 to 15,000) V
<b>Step Mode</b>	Up to 10 steps (voltage and duration configurable for each step)	
<b>Voltage Test / Safety Test</b>	2500 V <sub>AC</sub> to 4000 V <sub>DC</sub>	
<b>Capacitance Measurement</b>	(0.005 to 19.99) μF	
<b>Leakage Current Measurement</b>	(0 to 10) mA	
<b>Discharge After Test</b>	Yes / Automatic	
<b>Additional Test Stop Modes</b>		
I-Limit	Programmable: (0.2 to 5) mA	
Early-Break	di / dt	
Timer	Up to 99 m 59 s	
<b>Burn Mode</b>	Constant testing	
<b>Ratio Calculation</b>	PI, DAR, DD	
<b>Calculation of R at ref. T°</b>	Yes	
<b>Measurement Display Filter</b>	3 filters with 3 possible time constants	
<b>Graphs on Display</b>	R(t)+V(t); I(t); I(V)	
<b>Storage</b>	256 registers, stores 80,000 points: R, V, I and date	
<b>Communication</b>	USB optically-isolated port	
<b>Power Supply</b>	NiMH rechargeable batteries, (2) 9.6 V 4 A-h battery packs charging by external voltage: (90 to 260) V; (50 / 60) Hz	
<b>Battery Charging</b>	Battery charging allowed while performing insulation measurements	
<b>Dimensions</b>	(13.39 x 11.81 x 7.87) in (340 x 300 x 200) mm	
<b>Weight</b>	approx. 13.7 lb (6.2 kg)	
<b>SAFETY</b>		
<b>Safety Rating</b>	1000 V CAT IV	
<b>EMC / Ingress Protection / Altitude</b>	EN 61326-1 / IP54 / 2000 m	

Consult factory for NIST Calibration prices.

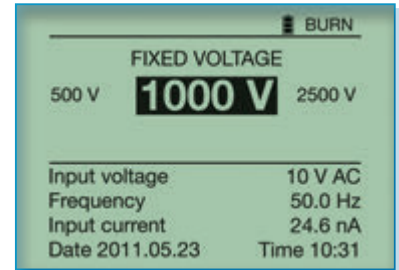
## ACCESSORIES/REPLACEMENTS

- CAT. #2133.72 Small classic tool bag
- CAT. #2135.41 Optical USB cable
- CAT. #2140.19 (1) 9.6 V NiMH battery (two required)
- CAT. #2151.36 Lead – Set of (3) color-coded (red/black/blue) 10 ft safety leads w/clips (15 kV)
- CAT. #2151.37 Lead – 1.5 ft blue jumper lead (15 kV)
- CAT. #2151.38 Lead – Set of (3), 25 ft, 15 kV color-coded (red/blue/black) safety leads w/clips
- CAT. #2151.39 Lead – One 45 ft, 15 kV, blue guard with integral clip
- CAT. #2151.40 Lead – One 45 ft, 15 kV, red guard with integral clip
- CAT. #2151.41 Lead – One 45 ft, 15 kV, black guard with integral clip
- CAT. #5000.32 Power cord - 240 V EU

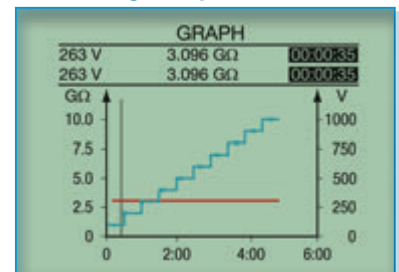
CAT. #	DESCRIPTION
2130.31	Megohmmeter Model 6550 (Graphical, Analog Bargraph, Backlight, Alarm, Timer, (500, 1000, 2500, 5000) V and 10 kV, Ramp, StepV, Variable, Auto DAR/PI/DD, USB, w/DataView® Software)
2130.32	Megohmmeter Model 6555 (Graphical, Analog Bargraph, Backlight, Alarm, Timer, (500, 1000, 2500, 5000) V and 10 kV, 15 kV, Ramp, StepV, Variable, Auto DAR/PI/DD, DataView® software)

## Multiple Voltage Ramp & Step Test Modes

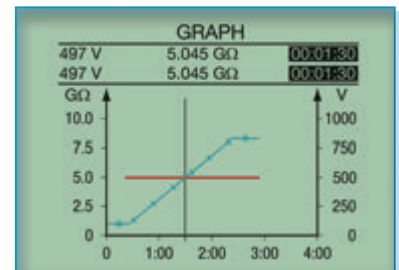
### Burn-In Test Mode



### Voltage Step Test Mode



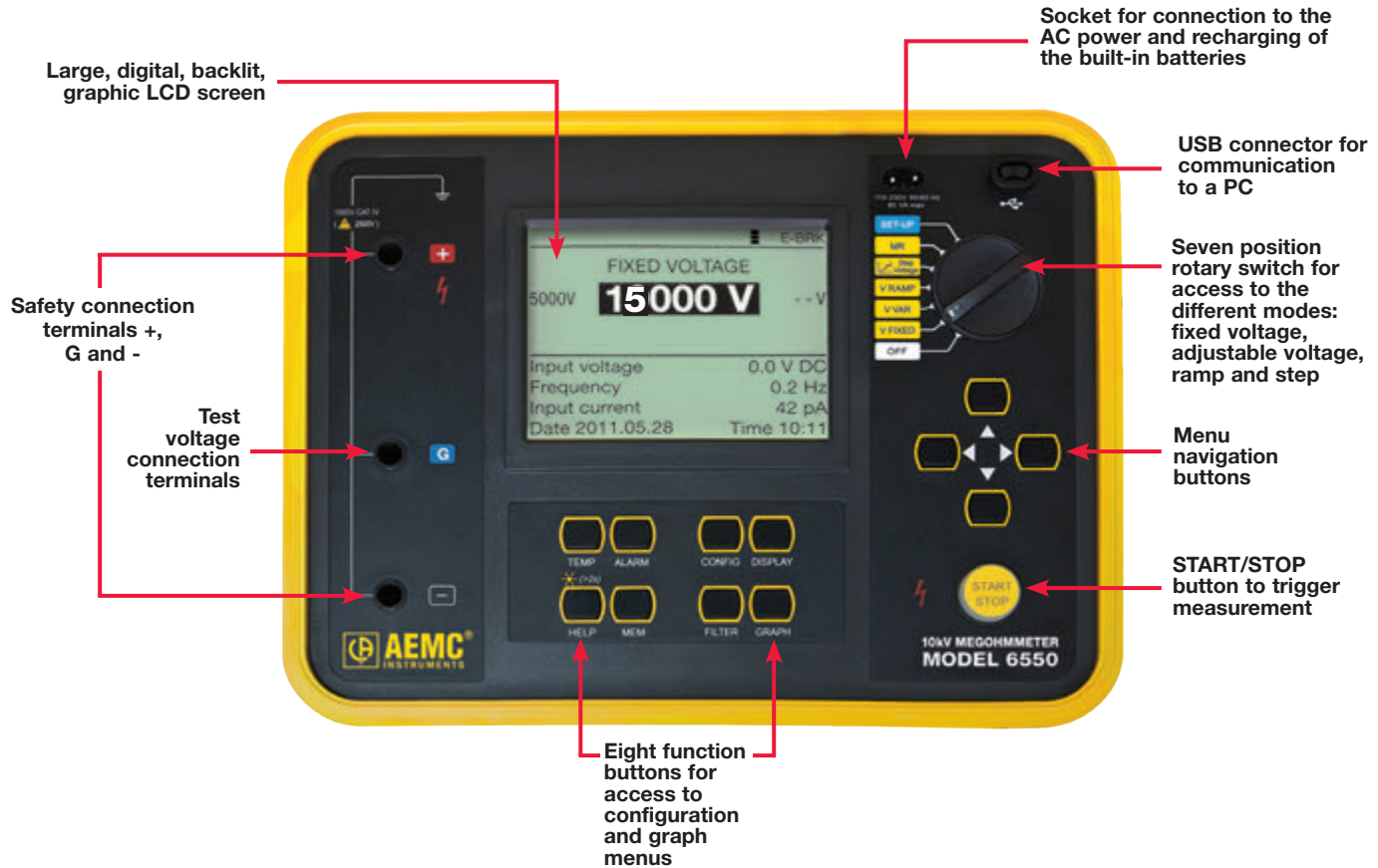
### Voltage Ramp Test Mode





# 10,000 V/15,000 V Digital Megohmmeters

## FRONT PANEL FEATURES



Test Mode Voltage and Measurement Results Display Area

E-BRK	
FIXED VOLTAGE	
5000V	<b>15000 V</b> -- V
Input voltage	0.0 V DC
Frequency	0.2 Hz
Input current	42 pA
Date 2011.05.23	Time 10:11

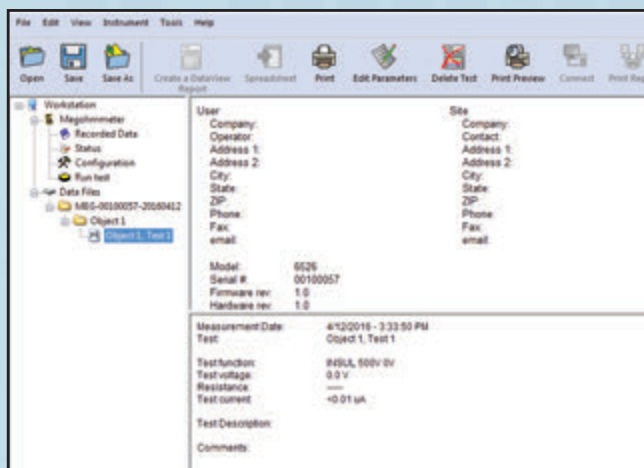
Display of Supporting Test Results

# DataView® Software Included

## DataView® Data Analysis & Reporting Software

Configure All Functions of Models  
1060, 5060, 5070, 6526, 6534, 6550 & 6555

- Print reports of all test results
- Select test voltage and run tests from your computer with a simple click and execute process
- Capture and display data in real-time
- Retrieve data from the instrument's memory:
  - Over 1500 insulation resistance measurements (Model dependent)
  - Storage of 80,000 measurements (Model dependent)
- Display DAR and PI ratios
- Plot graphs of manual and timed tests
- Include your analysis comments section with the report
- Store a library of set ups for different applications
- Certification of results through report generation
- Free updates are available on our website.



Tree structured status screen provides the ability to select connected instruments, configure instruments, see the instrument's status and review stored test results.

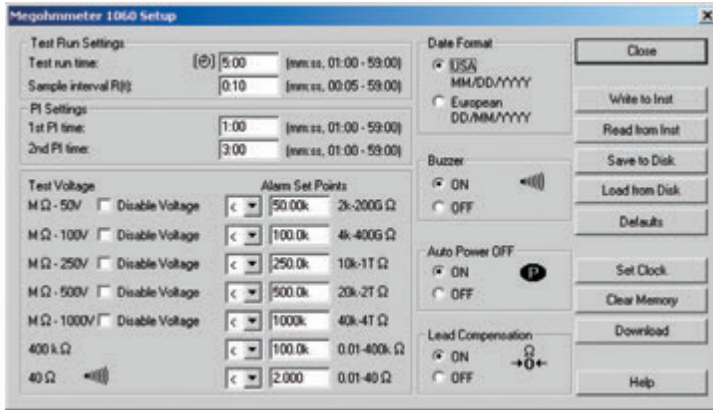
**DataView® Software** automatically recognizes the instrument when it is connected to the PC allowing communication through the corresponding control panel. The tree structure menu offers direct access to the data recorded in the instrument and its configuration.

### Other Functions Available:

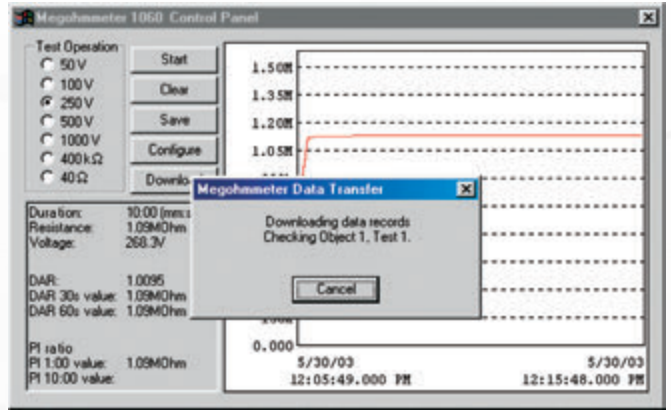
- Start and stop tests from your PC
- Real-time display of active tests
- DAR and PI ratio programming and display
- Graphical plot of the tests
- Generate reports from test results

# Configuration & Analysis Screens

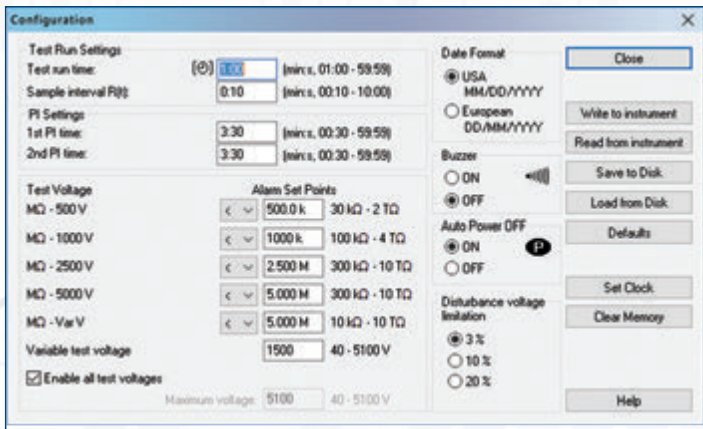
## DataView® Data Analysis & Reporting Software



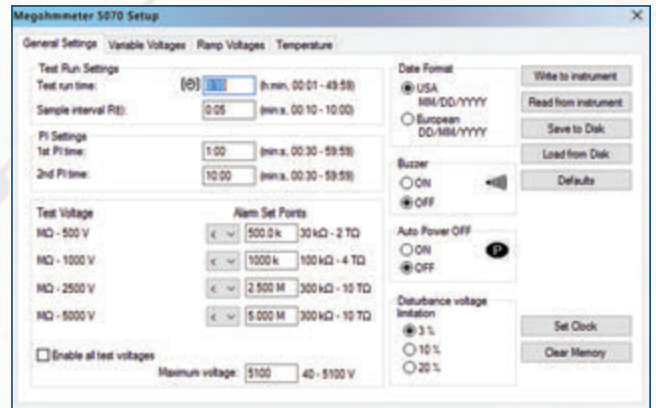
Clear and easy setup of all functions from one dialog box.



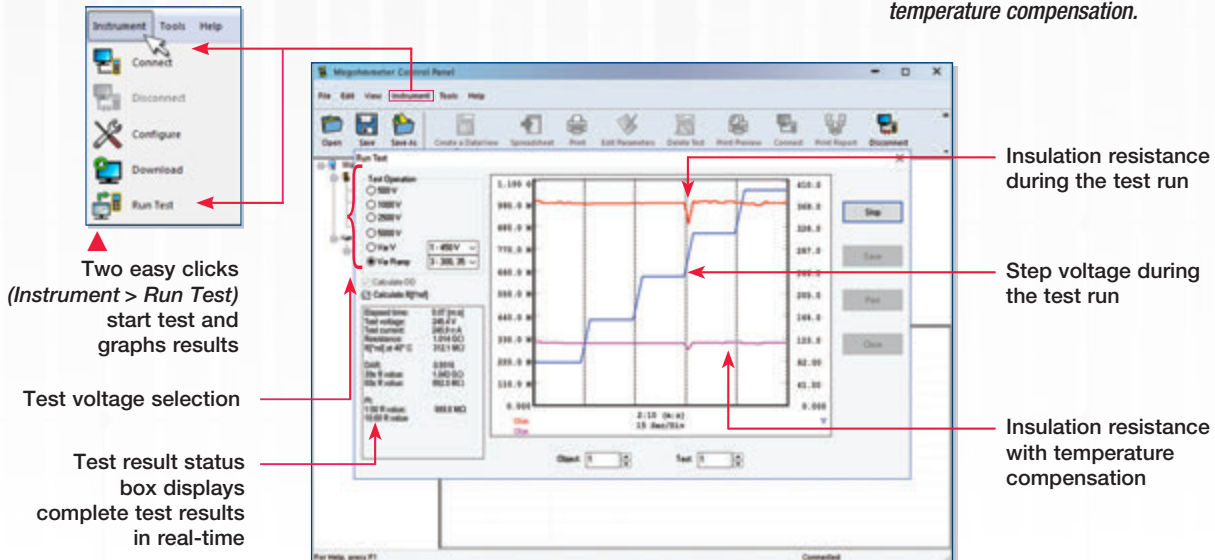
A simple press of the download button from either the setup or run dialog boxes will show all test results stored in the Model 1060.



Configuration screen allows you to set alarm levels, test time and to read and write configurations from and to the instrument.



Four tabbed dialog boxes allow for clear and easy setup of all functions of the Model 5070, including setup for variable voltage and alarm set points, as well as step voltage tests and temperature compensation.

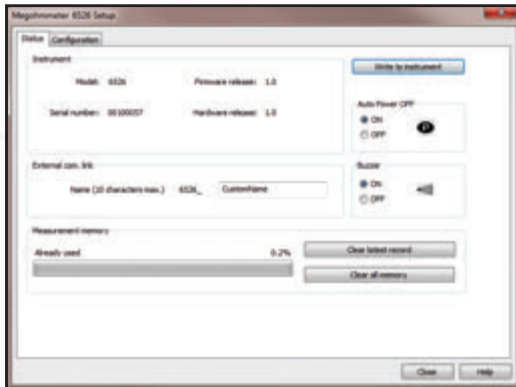


Run test and display text and graphical results from one dialog box. Model 5070 also displays step voltage.



# Configuration & Analysis Screens

## DataView® Data Analysis & Reporting Software



Status screen allows you to assign a unique name for the instrument and to check and clear memory as needed.



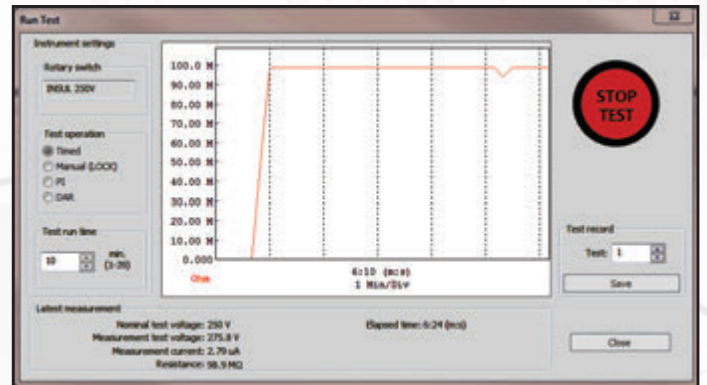
Configuration screen allows you to set alarm levels, test time and to read and write configurations from and to the instrument.



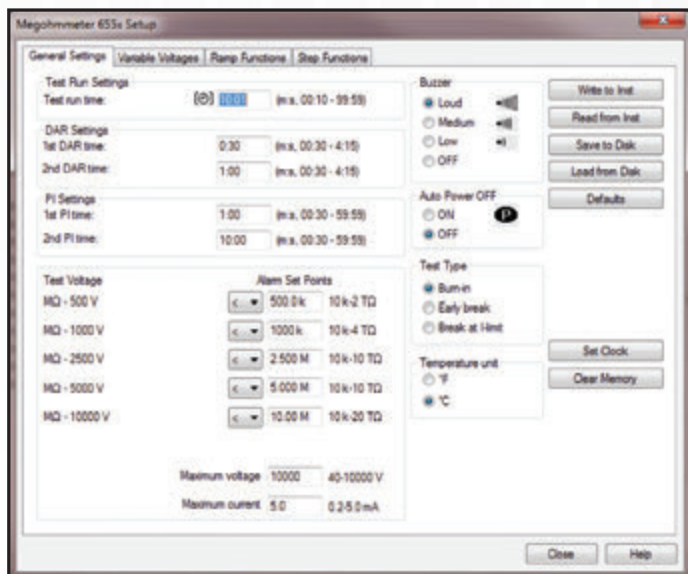
Select individual or multiple tests to download and review on your computer.



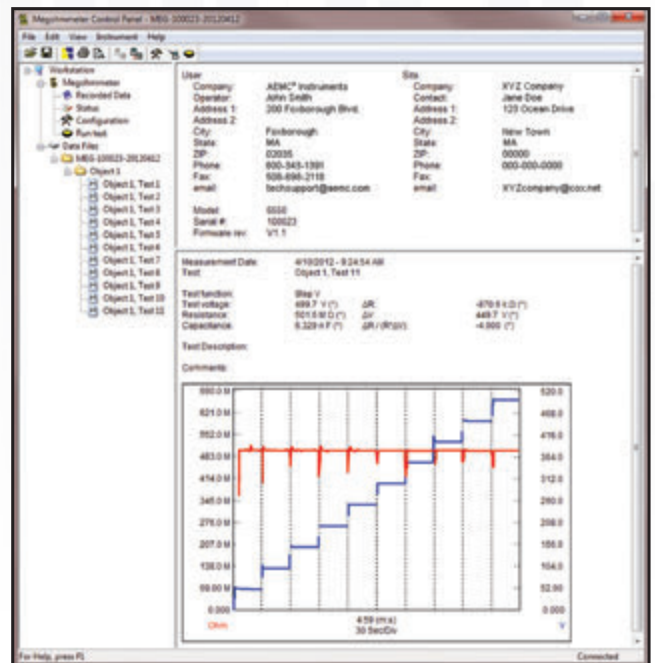
Select test conditions and start a test from the PC and display real-time measurement results graphically.



Stop a test in progress and display the test results.



Clear and straight forward setup of parameters.



Easy identification of all stored test results.

# Megohmmeter Selection Guide



## 10 V & 100 V Megohmmeters

AEMC® Instruments offers low voltage insulation testers designed for both field and shop use. They are well suited for measuring the qualities of phone cables, data cables and ESD Floor Testing. Measurement of AC and DC voltage, resistance, continuity, cable capacitance, cable length and AC current can also be performed.



## 500 V Megohmmeters

AEMC® Instruments offers a complete line of insulation testers designed to test the quality of insulation on equipment powered from sources up to 240 V using test voltages up to 500 V. Both analog and digital meters are available. AC powered, battery powered and hand-cranked models are available. Measurements can be in the  $M\Omega$ ,  $G\Omega$  and  $T\Omega$  range. Most models offer multifunction capability, measuring AC/DC volts, resistance and continuity, as well as insulation resistance.



## 1000 V Megohmmeters

AEMC® Instruments offers a complete line of insulation testers designed to test the quality of insulation using 1000 V test voltage (required for testing equipment powered from sources up to 480 VAC). Both analog and digital meters are available. AC powered, battery powered and hand-cranked models are available. Many models can measure into the  $G\Omega$  and  $T\Omega$  range. Most models offer multifunction capability, measuring AC/DC volts, resistance and continuity, as well as insulation resistance. Both hand-held instruments and rugged instruments built into portable cases are available.



## 5000 V Megohmmeters

AEMC® Instruments offers a complete line of insulation testers designed to test the quality of insulation using 5000 V test voltages required for testing large motors, generators, transformers, cables and large rotating machinery. AC powered and battery powered models are available. All models can measure into the  $G\Omega$  and  $T\Omega$  ranges. All models offer multifunction capability, measuring AC/DC volts, resistance and continuity, as well as insulation resistance.



## 10 kV & 15 kV Megohmmeters

AEMC® Instruments offers a complete line of safe and accurate insulation testers that are ideal for use on rotating equipment and machinery operating at 10 kV or higher. They are the only fully automated (10,000 and 15,000) V graphical insulation testers. They provide insulation measurements up to 29,000  $G\Omega$  (29  $T\Omega$ ). Test results include DAR, PI, DD,  $\Delta R$ , Capacitance, Leakage Current, as well as programmable temperature correction of resistance readings.

# Megohmmeter Selection Chart

MODEL NUMBER	CAT. NUMBER	TEST VOLTAGE	INSULATION RANGE	RESISTANCE RANGE	CONTINUITY RANGE	CAPACITANCE RANGE	VOLTAGE DETECTION	POWER SOURCE	DISPLAY	DATAVIEW® SOFTWARE
6503	2126.52	250 V 500 V 1000 V	(1 to 500) MΩ (1 to 500) MΩ (10 to 5000) MΩ		–		600 V <sub>AC</sub>	Hand-cranked	Analog	No
6522	2155.51	250 V 500 V 1000 V	50 kΩ to 10 GΩ 100 kΩ to 20 GΩ 200 kΩ to 40 GΩ	–	10 Ω	–	700 V <sub>AC</sub> / DC	(6) AA Alkaline Batteries	Digital / Analog	No
6527	2126.53	250 V 500 V 1000 V	1 kΩ to 4 GΩ 1 kΩ to 4 GΩ 1 kΩ to 4 GΩ	400 kΩ	400 Ω	—	600 V <sub>AC</sub> 1000 V <sub>DC</sub>	(6) AA Alkaline Batteries	Digital / Analog	No
6529	2126.55	50 V 100 V 250 V 500 V 1000 V	(0.010 to 420) MΩ (0.020 to 420) MΩ (0.050 to 4200) MΩ (0.100 to 4200) MΩ 0.20 MΩ to 11 GΩ	(0 to 420) kΩ	(0 to 40) Ω (200 mA test current ≤ 2 Ω)	–	700 V <sub>AC</sub> 700 V <sub>AC</sub> / DC	(6) AA Alkaline Batteries	Digital	No
6526	2155.53	50 V 100 V 250 V 500 V 1000 V	10 kΩ to 10 GΩ 20 kΩ to 20 GΩ 50 kΩ to 50 GΩ 100 kΩ to 100 GΩ 200 kΩ to 200 GΩ	1000 kΩ	(10, 100) Ω	0.1 nF to 10 μF	700 V <sub>AC</sub> / DC	(6) AA Alkaline Batteries	Digital / Analog	Yes
6534	2155.55	10 V 25 V 100 V 250 V 500 V	2 kΩ to 1 GΩ 5 kΩ to 2 GΩ 10 kΩ to 10 GΩ 50 kΩ to 25 GΩ 100 kΩ to 50 GΩ	1000 kΩ	(10, 100) Ω	–	700 V <sub>AC</sub> / DC	(6) AA Alkaline Batteries	Digital / Analog	Yes
6536	2155.56	(10-100) V <i>(variable in 1 V steps)</i>	2 kΩ to 20 GΩ	1000 kΩ	(10, 100) Ω	–	700 V <sub>AC</sub> / DC	(6) AA Alkaline Batteries	Digital / Analog	No
6536 ESD Floor Kit	2155.57									
1060	2130.03	50 V 100 V 250 V 500 V 1000 V	2 kΩ to 200 GΩ 4 kΩ to 400 GΩ 10 kΩ to 1 TΩ 20 kΩ to 2 TΩ 40 kΩ to 4 TΩ	400 kΩ	40 Ω	(0.005 to 4.999) μF	1000 V <sub>AC</sub> / DC	Rechargeable NiMH Battery	Digital / Analog	Yes
6505	2130.18	500 V 1000 V 2500 V 5000 V	10 kΩ to 2 TΩ 10 kΩ to 4 TΩ 10 kΩ to 10 TΩ 10 kΩ to 10 TΩ	–	–	(0.001 to 49.99) μF	2500 V <sub>AC</sub> 4000 V <sub>DC</sub>	Rechargeable NiMH Battery	Digital / Analog	No
5050	2130.20	500 V 1000 V 2500 V 5000 V	10 kΩ to 2 TΩ 10 kΩ to 4 TΩ 10 kΩ to 10 TΩ 10 kΩ to 10 TΩ	–	–	(0.001 to 49.99) μF	2500 V <sub>AC</sub> 4000 V <sub>DC</sub>	Rechargeable NiMH Battery	Digital / Analog	No
5060	2130.21	500 V 1000 V 2500 V 5000 V	10 kΩ to 2 TΩ 10 kΩ to 4 TΩ 10 kΩ to 10 TΩ 10 kΩ to 10 TΩ	–	–	(0.001 to 49.99) μF	2500 V <sub>AC</sub> 4000 V <sub>DC</sub>	Rechargeable NiMH Battery	Digital / Analog	Yes
5070	2130.30	500 V 1000 V 2500 V 5000 V	10 kΩ to 2 TΩ 10 kΩ to 4 TΩ 10 kΩ to 10 TΩ 10 kΩ to 10 TΩ	–	–	(0.001 to 49.99) μF	2500 V <sub>AC</sub> 4000 V <sub>DC</sub>	Rechargeable NiMH Battery	Graphic / Digital	Yes
6550	2130.31	500 V 1000 V 2500 V 5000 V 10,000 V	10 kΩ to 2000 GΩ 10 kΩ to 4000 GΩ 10 kΩ to 10,000 GΩ 10 kΩ to 15,000 GΩ 10 kΩ to 25,000 GΩ	–	–	(0.001 to 19.99) μF	2500 V <sub>AC</sub> 4000 V <sub>DC</sub>	Rechargeable NiMH Battery	Digital / Analog	Yes
6555	2130.32	500 V 1000 V 2500 V 5000 V 10,000 V 15,000 V	10 kΩ to 2000 GΩ 10 kΩ to 4000 GΩ 10 kΩ to 10,000 GΩ 10 kΩ to 15,000 GΩ 10 kΩ to 25,000 GΩ 10 kΩ to 29,000 GΩ	–	–	(0.001 to 19.99) μF	2500 V <sub>AC</sub> 4000 V <sub>DC</sub>	Rechargeable NiMH Battery	Digital / Analog	Yes

Consult factory for NIST Calibration prices.





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