Model 5070

Insulation resistance measurement graphically displayed at the completion of the test at the push of a button.

Offers real-time graphic plot of measurements and digital presentation of test results

▶ **FEATURES**

- True Megohmmeter®
- Test voltage selections of 500V, 1000V, 2500V and 5000V
- Insulation measurements from 30kΩ to 10,000GΩ (10TΩ)
- Selectable and programmable test voltage (40 to 5100V)
- Automatic calculation of DAR, PI and DD ratios
- Calculations of Step Voltage through front panel and Ramp test through software connection (Model 5070)
- 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 (if live sample >25V)
- Automatic discharge and display of discharge voltage
- Graphic and digital display of test voltage, resistance and more (Model 5070)
- Bright blue electroluminescent backlight
- Programmable temperature compensation (Model 5070)
- Programmable test voltage lock-out
- Programmable alarm setting
- Auto Power OFF when not in use
- AC or DC powered with rechargeable NiMH battery pack - run while charging
- Rugged, weatherproof field case
- Designed and built to IEC safety standards
- Includes DataView® software for data storage, real-time display, analysis and report generation (Models 5060 & 5070)
- EN 61010-1, 1000V CAT III

▶ **SPECIFICATIONS**

MODEL		5070
INSULATION TESTS		
Test Voltage	500V	30kΩ to 2000GΩ (2TΩ)
	1000V	100kΩ to 4000GΩ (4TΩ)
	2500V	100kΩ to 10,000GΩ (10TΩ)
	5000V	300kΩ to 10,000GΩ (10TΩ)
User Selectable Test Voltage		Programmable: 40 to 1000V: 10V increments; 1000 to 5100V: 100V increments
Automatic Step Voltage		Programmable step voltage and duration up to five steps. Three profiles can be stored.
Accuracy	1kΩ to 40GΩ	±5% of Reading ±3cts
	40GΩ to 10TΩ	±15% of Reading ±10cts
Voltage Test/Safety Check		2500V$_{AC}$/4000V$_{DC}$
Voltage Warning Indicator		Yes >25V
Test Inhibition*		Yes — adjustable from 25 to 1000V depending on test voltage range in use
Smooth Function (user selectable)		Digital filtering stabilizes display readings
COMMUNICATION		
Storage of Readings over Time R(t)		128kB memory
Storage of Test Results		Stores over 1500 test results
Communication Port		Serial and RS-232 to USB adapter (included)
PC Software/ Report Generation		DataView® (included)
ELECTRICAL		
Power Source		One 9.6V NiMH battery pack (included) Line power: 85 to 256V (50/60Hz)

**Inhibit voltage is selectable at 3, 10 or 20% of test voltage*

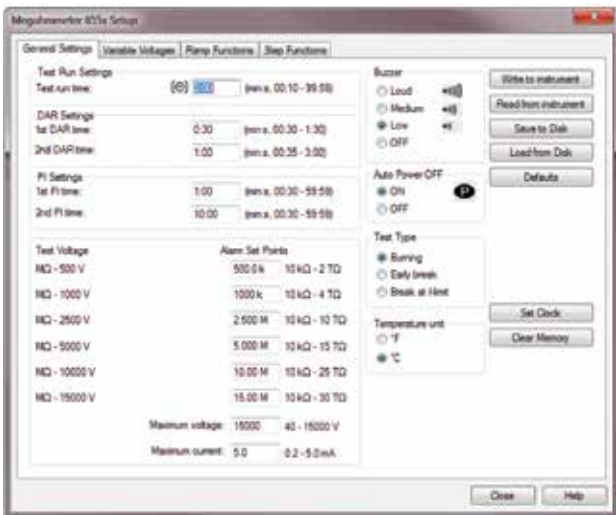| CATALOG NO.	DESCRIPTION
2130.30	Megohmmeter Model 5070 (Graphical, Analog Bargraph, Backlight, Alarm, Timer, 500V, 1000V, 2500V, 5000V, Step V, Auto DAR/PI/DD, USB Stick w/DataView® software)
Accessories (See last page for optional accessories)	
2119.45	Cable– Replacement PC RS-232, DB9 F/F 6 ft Null Modem Cable

AEMC® INSTRUMENTS
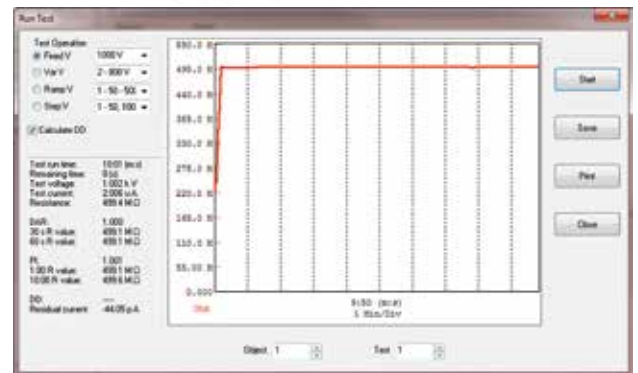
Data*View*® Displays
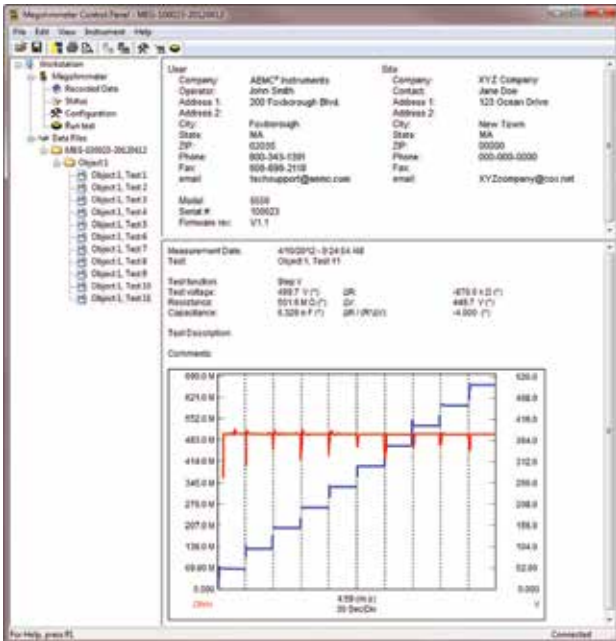
All stored test results presented on screen.
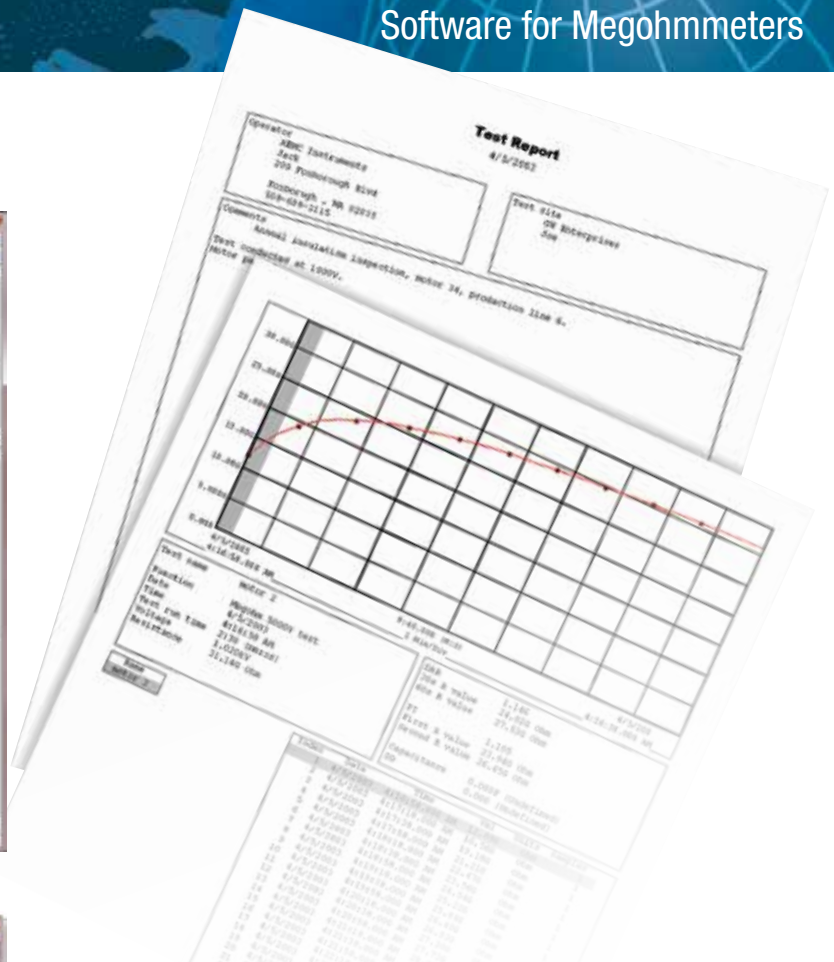
Standard and customized reports generated from DataView® software.

Clear and straightforward set up of parameters.

Real-time display of measurement results.

CATALOG NO.	DESCRIPTION
2130.31	Megohmmeter Model 6550 (Graphical, Analog Bargraph, Backlight, Alarm, Timer, 500V, 1000V, 2500V, 5000V, 10kV, Ramp, StepV, Variable, Auto DAR/PI/DD, USB Stick w/DataView® software)
2130.32	Megohmmeter Model 6555 (Graphical, Analog Bargraph, Backlight, Alarm, Timer, 500V, 1000V, 2500V, 5000V, 10kV, 15kV, Ramp, StepV, Variable, Auto DAR/PI/DD, USB Stick w/DataView® software)
Accessories (optional)	
2151.18	Lead – One Shielded Safety Lead (black) 25 ft w/Hippo Clips (15kV)
2151.19	Lead – One Shielded Safety Lead (blue) 25 ft w/Hippo Clips (15kV)
2151.20	Lead – One Shielded Safety Lead (red) 25 ft w/Hippo Clips (15kV)
2151.21	Lead – One Shielded Safety Lead (black) 45 ft w/Hippo Clips (15kV)
2151.22	Lead – One Shielded Safety Lead (blue) 45 ft w/Hippo Clips (15kV)
2151.23	Lead – One Shielded Safety Lead (red) 45 ft w/Hippo Clips (15kV)

Data*View*®

Data Analysis and Reporting Software

Configure all functions of the Megohmmeter
Models 1060, 5060, 5070, 6526, 6532, 6534, 6550 & 6555

AUTOMATIC REPORT GENERATION

- 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 for:
  - Over 1500 insulation resistance measurements
  - Over 4000 resistance measurements

- Display DAR and PI ratios
- Plot graphs of manual and timed tests
- Include your analysis comments section with the report
- Store a library of setups for different applications
- Certification of results through report generation
- Free updates are available on our website **www.aemc.com**
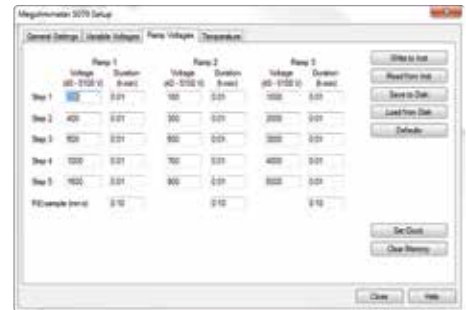
Typical DataView® Functional Displays

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.
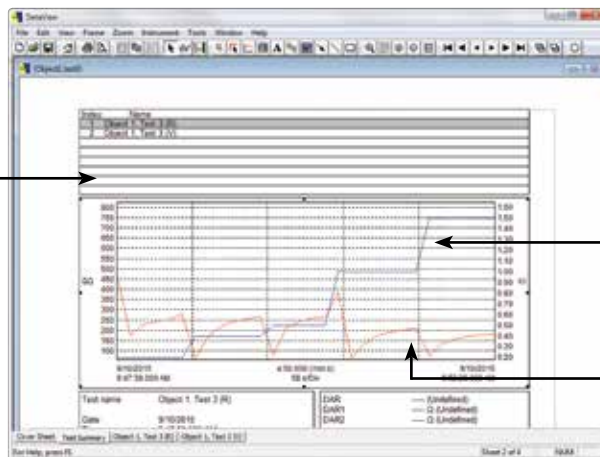

Variable Voltage selections from 40 to 5100V and can also be programmed along with alarm set points.

Model 5070 includes Ramp Function which allows programming of three different ramp test profiles, each containing up to five voltage steps between 40 and 5100V and time per step of up to 10 hours.

Test result status box displays complete test results in real-time

Step voltage during the test run

Insulation resistance with temperature compensation

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

AEMC MODEL NUMBER	AEMC CATALOG NUMBER	TEST VOLTAGE	INSULATION RANGE	RESISTANCE RANGE	CONTINUITY RANGE	CAPACITANCE RANGE	VOLTAGE DETECTION	POWER SOURCE	DISPLAY	DATAVIEW® SOFTWARE
1050	2130.01	50V 100V 250V 500V 1000V	2kΩ to 200GΩ 4kΩ to 400GΩ 10kΩ to 1TΩ 20kΩ to 2TΩ 40kΩ to 4TΩ	0.01 to 400kΩ	0.01 to 39.99Ω	0.005 to 4.999µF	0 to 1000VAC/DC	8 x 1.5V C Cell Batteries	Digital/ Analog	No
1060	2130.03	50V 100V 250V 500V 1000V	2kΩ to 200GΩ 4kΩ to 400GΩ 10kΩ to 1TΩ 20kΩ to 2TΩ 40kΩ to 4TΩ	0.01 to 400kΩ	0.01 to 39.99Ω	0.005 to 4.999µF	0 to 1000VAC/DC	Rechargeable NiMH Battery	Digital/ Analog	Yes
5050	2130.20	500V 1000V 2500V 5000V	30kΩ to 2TΩ 100kΩ to 4TΩ 100kΩ to 10TΩ 300kΩ to 10TΩ	—	—	0 to 49.99µF	2500VAC 4000VDC	Rechargeable NiMH Battery	Digital/ Analog	No
5060	2130.21	500V 1000V 2500V 5000V	30kΩ to 2TΩ 100kΩ to 4TΩ 100kΩ to 10TΩ 300kΩ to 10TΩ	—	—	0 to 49.99µF	2500VAC 4000VDC	Rechargeable NiMH Battery	Digital/ Analog	Yes
5070	2130.30	500V 1000V 2500V 5000V	30kΩ to 2TΩ 100kΩ to 4TΩ 100kΩ to 10TΩ 300kΩ to 10TΩ	—	—	0 to 49.99µF	2500VAC 4000VDC	Rechargeable NiMH Battery	Graphic/ Digital	Yes
6501	2126.51	500V	0.5 to 200MΩ	0 to 500kΩ	0 to 100Ω	—	0 to 600VAC	Hand-cranked	Analog	No
6503	2126.52	250V 500V 1000V	1 to 500MΩ 1 to 500MΩ 10 to 5000MΩ	—	—	—	0 to 600VAC	Hand-cranked	Analog	No
6505	2130.18	500V 1000V 2500V 5000V	30kΩ to 2000GΩ 100kΩ to 4000GΩ 100kΩ to 10,000GΩ 300kΩ to 10,000GΩ	—	—	0.005 to 49.99µF	2500VAC 4000VDC	Rechargeable NiMH Battery	Digital/ Analog	No
6522	2155.51	250V 500V 1000V	50kΩ to 40GΩ	—	10Ω	—	700VAC/DC	6 x AA Alkaline Batteries	Digital/ Analog	No
6524	2155.52	50V 100V 250V 500V 1000V	10kΩ to 200GΩ	1000kΩ	10Ω, 100Ω	—	700VAC/DC	6 x AA Alkaline Batteries	Digital/ Analog	No
6526	2155.53	50V 100V 250V 500V 1000V	10kΩ to 200GΩ	1000kΩ	10Ω, 100Ω	0.1n to 10µF	700VAC/DC	6 x AA Alkaline Batteries	Digital/ Analog	Yes
6527	2126.53	250V 500V 1000V	1kΩ to 4GΩ 1kΩ to 4GΩ 1kΩ to 4GΩ	0.0 to 400.0kΩ	0.00 to 400Ω	—	0 to 600VAC 0 to 1000VDC	6 x AA Alkaline Batteries	Digital/ Analog	No
6532	2155.54	50V 100V	10kΩ to 20GΩ	1000kΩ	10Ω, 100Ω	0.1n to 10µF	700VAC/DC	6 x AA Alkaline Batteries	Digital/ Analog	Yes
6534	2155.55	10V 25V 100V 250V 500V	2kΩ to 50GΩ	1000kΩ	10Ω, 100Ω	—	700VAC/DC	6 x AA Alkaline Batteries	Digital/ Analog	Yes
6536	2155.56	10V 100V	2kΩ to 20GΩ	1000kΩ	10Ω, 100Ω	—	700VAC/DC	6 x AA Alkaline Batteries	Digital/ Analog	No
6536 ESD Floor Kit	2155.57									
6550	2130.31	500V 1000V 2500V 5000V 10,000V	10kΩ to 2000GΩ 10kΩ to 4000GΩ 10kΩ to 10,000GΩ 10kΩ to 15,000GΩ 10kΩ to 25,000GΩ	—	—	0.001 to 9.999µF 10.00 to 49.99µF	0 to 2500VAC 0 to 4000VDC	Rechargeable NiMH Battery	Digital/ Analog	Yes
6555	2130.32	500V 1000V 2500V 5000V 10,000V 15,000V	10kΩ to 2000GΩ 10kΩ to 4000GΩ 10kΩ to 10,000GΩ 10kΩ to 15,000GΩ 10kΩ to 25,000GΩ 10kΩ to 30,000GΩ	—	—	0.001 to 9.999µF 10.00 to 49.99µF	0 to 2500VAC 0 to 4000VDC	Rechargeable NiMH Battery	Digital/ Analog	Yes