

# MEGOHMMETERS

## 10,000 V/15,000 V DIGITAL

1000 V  
CAT IV

## MODELS 6550 & 6555

*Ideal for use on rotating machinery, transformers and cables operating at higher voltages*



## FEATURES

- True Megohmmeter®
- Fixed or programmable test voltage from 40 V to (10/15) kV
- Wide measurement range from 10 kΩ to (25/30) TΩ
- 5 mA short circuit current
- Step and Ramp voltage testing
- Automatic calculation of DAR/PI/DD/ΔR (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® software for data retrieval, real-time display, analysis and report generation
- Optically-isolated USB communication for transfer onto PC and report generation with DataView® software

## 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 – Replacement Set of 3, 10 ft (15 kV) with integral clips

**CAT. #2151.37** Lead – Replacement 1.5 ft (15 kV) blue jumper lead

**CAT. #2151.38** Lead – Set of (3), 25 ft, 15 kV w/ integral clips

**CAT. #2151.39** Lead – One 45 ft, (15 kV), blue with integral clip

**CAT. #2151.40** Lead – One 45 ft, (15 kV), red with integral clip

**CAT. #2151.41** Lead – One 45 ft, (15 kV), black with integral clip

**CAT. #5000.32** Power cord – 240 V EU

## 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® software and user manual.

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 30,000 GΩ (30 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 ( <i>voltage and duration configurable for each step</i> )	
<b>Voltage 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 ( <i>Automatic</i> )	
<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 / Weight</b>	(13.39 x 11.81 x 7.87) in (340 x 300 x 200) mm /approx. 13.7 lb (6.2 kg)	
<b>SAFETY</b>		
<b>Safety Rating</b>	1000 V CAT IV; IEC 61010-1 and IEC 61557	
<b>EMC / Mechanical Protection / Altitude</b>	EN 61326-1 / IP54 / 2000 m	

Consult factory for NIST Calibration prices.

## CAT. # DESCRIPTION

2130.31	Megohmmeter Model 6550 (Graphical, Analog Bargraph, Backlight, Alarm, Timer, (500, 1000, 2500, 5000) V, 10 kV, Ramp, Step V, 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, (10, 15) kV, Ramp, Step V, Variable, Auto DAR/PI/DD, DataView® software)

# MEGOHMMETERS

## SELECTION CHART

AEMC® MODEL NUMBER	CAT. #	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/DC</sub>	(6) AA Alkaline Batteries	Digital / Analog	No
6527	2126.53	250 V 500 V 1000 V	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 420) 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/DC</sub>	(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 n to 10 μF	700 V <sub>AC/DC</sub>	(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/DC</sub>	(6) AA Alkaline Batteries	Digital / Analog	Yes
6536	2155.56	10 V 100 V	2 kΩ to 20 GΩ	1000 kΩ	(10, 100) Ω	–	700 V <sub>AC/DC</sub>	(6) AA Alkaline Batteries	Digital / Analog	No
6536 ESD Floor Kit	2155.57	(variable in 1 V steps)								
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/DC</sub>	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
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 30,000 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.