



Megohmmeter Model 5050

Cat. #2130.20

Digital, Analog Bargraph, Backlight, Alarm, Timer, 500 V, 1000 V, 2500 V, 5000 V, Auto DAR/PI/DD

Displays test voltage, insulation resistance, and leakage current during the test; and capacitance and discharge voltage present at the test leads at the conclusion of the test. Features include automatic calculation and presentation of the Dielectric Absorption Ratio (DAR) and Polarization Index (PI).

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AC/DC Voltage Measurement	
Range	(1 to 4000) V
Accuracy	(1 to 99.9) V: $\pm(1\% R + 5\text{ct})$ (100 to 4000) V: $\pm(1\% R + 3\text{ct})$
Resolution	(1 to 99.9) V: 0.1 V (100 to 999) V: 1 V (1000 to 4000) V: 2 V
Frequency Range	(1 to 2500) V: DC or (15 to 500) Hz (2501 to 4000) V: DC
Input Impedance	750 k Ω or 3M Ω (range dependent)
Insulation Measurement	
Test Voltage / Resistance Range	500 V: 10 k Ω to 2 T Ω (2000 G Ω) 1000 V: 10 k Ω to 4 T Ω (4000 G Ω) 2500 V: 10 k Ω to 10 T Ω (10,000 G Ω) 5000 V: 10 k Ω to 10 T Ω (10,000 G Ω)
Measurement Accuracy	30 k Ω to 39.99 G Ω : $\pm(5\% R + 3\text{ct})$ 40.0 G Ω 10 T Ω : $\pm(15\% R + 10\text{ct})$
Variable Voltage	(50 to 5000) V : 10 k Ω to 160 G Ω to 10 T Ω
Auto Discharge	Discharge time < 7 s/ μ F from V _{test} to 25 V @ 5000 V
Live Circuit Indicator	Test inhibition if terminal voltage > (3, 10, 20) % (selectable by user) of test voltage
General Features	
Programmable Alarm	Yes
DAR – PI – DD	Yes

For more details, download the datasheet or user manual at www.aemc.com

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Ramp Mode	No
Step Mode	No
Capacitance Measurement	(0.005 to 49.99) μ f
Leakage Current Measurement	(0 to 3) mA
Open Circuit Voltage	$\leq 1.1 \times V_n \pm 2 \text{ V}$ ($V_n \pm 2\%$ in variable mode)
Memory	4 kB Memory / Stores 20 test results
Power Supply	Rechargeable NIMH battery pack; external (85 to 256) V, 50/60Hz
Battery Life	≥ 1500 tests at 5000 V into 5 M Ω with a duty cycle of 5 seconds on and 25 seconds off
Charging Time	6 h approximately (charging allowed during tests)
Dimensions	(10.63 x 9.84 x 7.09) in (270 x 250 x 180) mm
Weight	9.5 lbs (4.3 kg)
Altitude Operating	6562 ft (2000 m)
Operating Temperature	(14 to +131) °F (-10 to +55°C) °C $\leq 80 \%$ RH
Storage Temperature	(-40 to 158) °F (-40 to 70) °C $\leq 90 \%$ RH
IP Rating	IP 53
Safety Compliance	EN 61010-1, EN 61557, 1000 V CAT III, Pollution Degree 2 CE

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