

5000V Megohmmeter Model 6505



The Megohmmeter Model 6505 is a portable instrument housed in a rugged field case and operates on either battery or line power. It performs voltage, insulation, and capacitance measurements. This instrument contributes to the safety of electrical installations and equipment.

Features include automatic calculation and presentation of the Dielectric Absorption Ratio (DAR) and Polarization Index (PI). The Model 6505 displays the test voltage, insulation resistance and the leakage current during the test. Capacitance of the sample and discharge voltage present at the test leads is displayed at the conclusion of the test.

The Model 6505 is designed with the highest level of built-in safety features. This meter incorporates 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.

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Features

- Test voltage combination of 500V, 1000V, 2500V and 5000V
- Insulation measurements from 30kΩ to 10TΩ
- Adjustable and programmable test voltage (40 to 5100V)
- Automatic calculation of DAR and PI values
- Direct measurement and display of Capacitance and Leakage Current
- Display of resistance, test voltage and run time
- Programmable test run times and PI ratio times
- Automatic test inhibition, if live sample (>25)
- Automatic discharge and display of discharge voltage
- Large dual-display with time, voltage and measurements shown
- Rugged dual wall weatherproof field case
- Designed and built to IEC safety standards
- EN 61010-1, 1000V CAT III

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
- Test old or water damaged installations over long time runs
- Motor insulation resistance measurements

Specifications

SPECIFICATIONS									
MODEL	6505								
INSULATION TESTS									
Test Voltage/Range	<table border="0"> <tr> <td>500V</td> <td>30kΩ to 2000GΩ (2TΩ)</td> </tr> <tr> <td>1000V</td> <td>100kΩ to 4000GΩ (4TΩ)</td> </tr> <tr> <td>2500V</td> <td>100kΩ to 10,000GΩ (10TΩ)</td> </tr> <tr> <td>5000V</td> <td>300kΩ to 10,000GΩ (10TΩ)</td> </tr> </table>	500V	30kΩ to 2000GΩ (2TΩ)	1000V	100kΩ to 4000GΩ (4TΩ)	2500V	100kΩ to 10,000GΩ (10TΩ)	5000V	300kΩ to 10,000GΩ (10TΩ)
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User Programmable Test	40 to 1000V: 10V increments 1000 to 5100V: 100V increments								
Short Circuit Current	<1.6mA ± 5%								
Accuracy									
10kΩ to 40GΩ	±5% of Reading ± 3cts								
40GΩ to 10TΩ	±15% of Reading ± 10cts								
DAR (1 min/30 sec)	0.02 to 50.00								
PI (10 min/1 min & user programmable)	0.02 to 50.00								
Capacitance Measurement	0.005 to 49.99µF; Max resolution 1nF								
Leakage Current Measurement	0.00nA to 3mA; Max resolution 1pA								
Programmable Run Time R(t)	1 to 60 minutes								
Discharge After Test	Yes, automatic								
Discharge Voltage Display	Yes								
Voltage Test/Safety Check	0 to 1000VAc/dc (16 to 420Hz); 1V Resolution								
Voltage Warning Indicator	Yes >25V								
Test Inhibition*	Yes >25V								
Guard Terminal	Yes – adjustable from 25 to 1000V depending on test voltage range in use								
ELECTRICAL									
Power Source	Eight NiMH rechargeable batteries (included); Line power: 85 to 256VAc (50/60Hz)								

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



Construction



1. Connection terminals “+”, “G” and “-” and access to the protective fuse
2. AC power plug (direct operation on AC and battery recharge)
3. Back-lit liquid crystal display
4. Serial interface male plug (9-pin) for calibration only
5. Rotary selector switch with 8 positions
6. START/STOP button
7. Two function buttons

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Accessories



Includes small classic tool bag, set of 3 color-coded 6 ft leads (5000V)(red, blue, black), set, of 3 color-coded alligator clips 600V CAT IV (red, blue, black), one blue jumper lead for use, with guard terminal, fuse 0.1A 380V, rechargeable battery pack (installed), US 115V power cord and user manual.

ORDERING INFORMATION	CATALOG NO.
Megohmmeter Model 6505 (Digital, with Analog Bargraph, Backlight, 500V, 1000V, 2500V, 5000V, Auto DAR/PI)	Cat. #2130.18
Accessories (Optional)	
Leads 5kV rated, set of three color-coded 10 ft 5kV safety leads (red, blue, black) and set of three alligator clips	Cat. #2119.76
Leads 5kV rated, set of three, 10 ft color-coded with color-coded clips; one red, one blue and one black with integral 5kV hippo clips (rated 5000V)	Cat. #2119.85
Leads 5kV rated, set of three, 25 ft color-coded with color-coded clips; one red, one blue and one black with integral 5kV hippo clips (rated 5000V)	Cat. #2119.86
Leads 5kV rated, set of three, 45 ft color-coded with color-coded clips; one red, one blue and one black with integral 5kV hippo clips (rated 5000V)	Cat. #2119.87

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