## **AMPROBE**°

**Data Sheet** 



# AMB-55, AMB-110 High Voltage Digital Megohmmeters – Insulation Resistance Testers

Amprobe Industrial High-Voltage Insulation Testers have all necessary features for advanced professional insulation diagnostics. Automated calculation of PI, DD and DAR, combined with a possibility to perform a step voltage test make these instruments suitable for the most demanding customers and applications. Large LCD display allows real time R(t) graphs to be displayed. Windows compatible PC Software and either RS232 or USB communications ports serve for connecting the instrument to the PC and management of the recorded test data.

- Test insulation of wires, cables, transformers, motors, surge arrestors and generators
- Selectable testing voltages one testing instrument for low and high voltage systems:
  - AMB-55 from 250V to 5000V with 25V increments
  - AMB-110 from 500V to 10,000V with 25V increments
- Insulation resistance measurement up to  $10T\Omega$ 
  - R(t) graph Real time resistance against time graph plotting facility to graphically illustrate the response of a material to an applied test voltage
  - User selectable Programmable Timer (1s to 99 min)
  - Automatic discharge of test object after completion of measurement
  - Capacitance Measurement
- Diagnostic tools
  - Polarization index (PI)
  - Dielectric discharge (DD)
  - Dielectric Absorption Ratio (DAR) with automated resistance ranging (AR).
- Step voltage test Insulation resistance will be measured at five different, equality sequenced test voltages for in-depth insulation system diagnostics



No waiting.





(note: \$500 MSLP limit)

it, on the spot.





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- All parameters can be measured and displayed in one single measurement.
- High charging capacity With 5 mA charging current insulation systems up to 50 μF can be quickly charged and tested.
- High EM (noise) immunity Built in noise rejection filters and shielded test leads supplied in a standard set make the instrument suitable for accurate insulation testing in environments with high EM interferences like HV switchyards or similar environments
- Handy, rugged carrying case
- Dual power source receptacle or rechargeable batteries
- Built in internal memory storing 1000 measurements with time and date
- CAT IV 600V overvoltage category for industrial applications

#### **General Specifications**

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Feature	AMB-55	AMB-110	Accuracy
Insulation Resistance	0 – 999 kΩ 1.00 – 9.99, 10.0 – 99.9, 100 – 999 ΜΩ 1.00 – 9.99, 10.0 – 99.9, 100 – 999 GΩ 1.00 – 10.00 ΤΩ		$\pm$ (5% rdg + 3 dgts) below 1T $\Omega$ $\pm$ (15% rdg + 3 dgts) @ 1T $\Omega$ and above
DC Test Voltage and Step Voltage	250 V to 5 kV, steps by 25 V	500 V to 10 kV, steps by 25 V	
Display Range Test Voltage	0 – 5500V	0 – 9999V	±(3% rdg + 3V)
		≥10kV	±(3% of reading)
Current Display Range	0.00 – 9.99, 10.0 – 99.9, 100 – 999 nA 1.00 – 9.99, 10.0 – 99.9, 100 – 999 μA 1.00 – 5.5 mA		±(5% rdg + 0.05 nA)
Dielectric Absorption Ratio (DAR)	0 – 99.9		±(5% rdg + 2 dgts)
Polarization Index (PI)	0 – 99.9		±(5% rdg + 2 dgts)
Dielectric Discharge Test (DD)	0 – 99.9		±(5% rdg + 2 dgts)
Leakage Current Display Range	0 – 5.50 mA		±(5% rdg + 2 dgts)
External Voltage Measurement	0 – 600V		±(3% rdg + 4V) @ 45 to 65Hz and DC
Capacitance Measurement	0.0– 99.9, 100 – 999 nF 1.00 – 50.00 μF		±(5% rdg + 4 nF)
Discharging Resistance	300 kΩ	425 kΩ	±10%
Mains Power Supply	90 - 260VAC, 45 - 60 Hz, 60VA		
Battery Power Supply	6 x 1.2V Ni-MH, IEC LR14	6 x 1.2V Ni-MH, IEC LR20	
Dimension (w x h x d)	31 x 13 x 25 cm (12 x 5 x 10 in)	36 x 16 x 33 cm (14.2 x 6.3 x 13 in)	
Weight (without accessories, with batteries)	3 kg (6.6 lb)	5.5 kg (12.1 lb)	

#### **Amprobe® Test Tools**

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