

MEGOHMMETER

DEFINITION

A MEGOHMMETER IS A HIGH RESISTANCE METER DEDICATED TO MEASURE AN OHMIC VALUE UNDER A DIRECT VOLTAGE OF GREAT STABILITY

To measure a high value resistance, techniques for measuring a low value current are used. A constant voltage source (DC Voltage) is applied to the resistance to be measured and the resulting current is read on a highly sensitive ammeter circuit that can display the resistance value (in M Ω , G Ω , T Ω)

A Megohmmeter is also called a high resistance tester, a teraohmmeter, a megger, a high insulation tester

APPLICATION

MANUFACTURER, LABORATORY, HIGH SPEED PRODUCTION, MAINTENANCE



- ▶ cable manufacturer (measure made on reel, on 1m cable samples, ... > shielding against wires)
- ▶ transformers, coils, electrical motors
- ▶ components (capacitors, resistances, ...)
- ▶ aeronautic, aerospace sub assemblies (satelites panels, ...)
- ▶ connectors, switches
- ▶ test laboratories (insulated materials such as paper, ceramic, plastics, ...)
- ▶ car industry (splices, cable samples in salty water, ...)
- ▶ printed circuit boards

SPECIFICATION OVERVIEW

FROM PORTABLE TO DESKTOP SOLUTIONS, FROM HAND USE TO REMOTE CONTROLLED USE, OUR RANGE COVER THEM ALL

- ▶ resistance measurement up to 2000 T Ω
- ▶ DC Voltage from 1V up to 70 kVDC (1V steps)
- ▶ picoammeter function from 0.1 pA
- ▶ GPIB, RS232, 0-10V, PLC available
- ▶ high accuracy down to 0.2%
- ▶ Surface Insulation Resistance (S.I.R.) testing according to IPC-TM-650 2.6.3.3, DIN 32513, ANSI/J-STD-004, Bellcore GR-78, JIS Z 3284, ... with IsoScan switching matrix
- ▶ Surface and resistance measurement according to DIN53482, VDE0303, IEC93 with our SRE24 probe



SELECTOR GUIDE

From the below board select the right product according to your application

Sefelec Megohmmeter range	Resistance range	DC voltage	Accuracy	Pico-ammeter	Interface	Portative	Software (in option)
SE6541	2kΩ - 2TΩ	50, 100, 250, 500, 1000	5%	No	No	Yes	No
SE6543	2kΩ - 2TΩ	50, 100, 250, 500, 1000	5%	No	RS232	Yes	No
SE6545	30kΩ - 10TΩ	500, 1000, 2500, 5000	5%	No	No	Yes	No
SE6547	30kΩ - 10TΩ	500, 1000, 2500, 5000	5%	No	RS232	Yes	No
MMG500	50kΩ - 200GΩ 2 TΩ option	50, 100, 250, 500	1,5%	No	GPIB, PLC, RS232, 0-10V analog output in option	No	SMG Pro
M1501M	100Ω - 2000TΩ	1 - 500 (1V steps) option up to 70kV DC	0,2%	0,01 pA-20mA	RS232 in option	No	No
M1501U	5kΩ - 20TΩ	10 - 1500 (10V steps)	0,2%	50 pA-3mA	No	No	No
M1501P	100Ω - 2000TΩ	1 - 1500 (1V steps) option up to 70kV DC	0,2%	0,01 pA-20mA	GPIB included RS232, PLC, 0-10V analog output in option	No	No
Isoscan S.I.R. testing with M1501P	1MΩ - 2000TΩ	1 - 1500 (1V steps) for measurement & polarisation (BIAS)	0,2%	0,01 pA-20mA	GPIB included	No	Isoscan
REMA Series	we also manufacture a wide range of high value standard resistors from 1 MΩ to 100 TΩ						

For product detailed datasheet, options, accessory details, demo softwares, and calibration tools or for more technical information about insulation resistance test, go to our website
All our equipment are delivered with data measurement, calibration certificate, CE mark certificate and user manual

SEFELEC ADDED VALUES

- ▶ a MΩ/km function for cable manufacturers
- ▶ resistance measurement under very high voltage up to 70kVDC
- ▶ surface resistance measurement with the SRE24 probe
- ▶ very easy to use
- ▶ one of the highest precision on the market

For more information on Sefelec products, applications or services, please contact your local Sefelec office.

The complete list is available at :

http://www.sefelec.com/carte_en.html



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