

Continuity testers

MI 3250 MicroOhm 10A



The MI 3250 MicroOhm 10A is portable low resistance ohmmeter for measuring low resistances of breakers and switches, busbars, cable joints, small to medium sized transformer and motor windings for industrial application, etc., with test current up to 10 A. The used 4-lead Kelvin testing method together with automatic bidirectional procedure ensure very high accuracy of test results (0,25%). The instrument can be powered by mains or internal rechargeable batteries. Test results can be stored on the instrument and with PC software HVLink PRO that is supplied as a part of standard set enables transfer of measured results to PC where they can be analysed or printed.

MEASURING FUNCTIONS

- Bidirectional resistance measurement from $0,1 \mu\Omega$ up to 2000Ω with test current up to 10 A;
- Temperature compensation (with optional temperature probe).

KEY FEATURES

- **Accurate:** $0.1 \text{ n}\Omega$ best resolution with 0.25% accuracy.
- **Bar graph:** on screen resistance bar graph.
- **Battery powered:** more than 1000 measurements with 10 A test current can be performed when powered by internal battery only.
- **Safe:** High overvoltage category CAT IV / 300 V.

- **Four measuring modes:** Automatic, single, continuous and inductive.
- **Automatic thermal EMF elimination:** with automatic bidirectional measurement.
- **Temperature compensation:** measured resistance can be adjusted according to ambient temperature, which can be entered manually or measured by external probe.
- **Custom limits:** limits can be set for PASS/ FAIL evaluation of test results.
- **Portable:** lightweight 3 kg design with carry handle and shoulder strap.
- **Memory:** built-in memory enables storage of up to 1000 test results.
- **Downloadable:** stored test results can be via RS232 or USB interface transferred to the PC with installed HVLink PRO software, which enables downloading, review, analyses and printing of the test results.

APPLICATION

Measurement the resistance of:

- Bus bar joints;
- Motor and transformer windings;
- Cables;
- Fuses;
- Aircraft frame bonds;
- Rail and pipe bonds;
- Lightning conductor bonding.

STANDARDS

Electromagnetic compatibility

- IEC 61326-1

Safety

- EN 61010-1;
- EN 61010-031;

TECHNICAL SPECIFICATION







FUNCTION	Measuring range	Resolution	Accuracy	Current
Resistance	1.9999 mΩ	0.1 μΩ	±(0.25 % of reading + 0.01 % FS)	10 A
	19.999 mΩ	1 μΩ	±(0.25 % of reading + 0.01 % FS)	10 A/1 A
	199.99 mΩ	10 μΩ	±(0.25 % of reading + 0.01 % FS)	10 A/1 A/100 mA
	1.9999 Ω	100 μΩ	±(0.25 % of reading + 0.01 % FS)	1 A/100 mA/10 mA
	19.999 Ω	1 mΩ	±(0.25 % of reading + 0.01 % FS)	100 mA/10 mA
	199.99 Ω	10 mΩ	±(1 % of reading + 0.1 % FS)	1 mA
	1.9999 kΩ	10 mΩ	±(0.25 % of reading + 0.01 % FS)	10 mA
	19.999 kΩ	100 mΩ	±(1 % of reading + 0.25 % FS)	1 mA
	199.99 kΩ	1 Ω	±(1 % of reading + 0.25 % FS)	1 mA
	Power supply (mains voltage)	90 ... 260 VAC / 60 VA		
Power supply (batteries)	6 x 1.2 V NiMH 3500 mAh batteries, type C			
Operation	> 1000 single measurements			
Overvoltage category	CAT IV / 300 V			
Protection class	Double insulation			
Display	320 x 240 LCD with backlight			
Communication	RS232 and USB			
Memory	1000 memory locations			
Dimensions	310 x 130 x 250 mm			
Weight	2.8 kg			

ORDERING INFORMATION



- Instrument MI 3250 MicroOhm 10A
- Large Kelvin test clip, 2 pcs
- Test cable with Kelvin Probe, 2 pcs
- Test cable, 2.5 m, 4 pcs (2 x black, 2 x red)
- Crocodile clip, 4 pcs (2 x black, 2 x red)
- Test probe, 2 pcs (red, black)
- Mains cable
- USB cable and RS232 cable
- NiMH rechargeable batteries, type C, 6 pcs
- PC SW HVLink PRO
- Bag for accessories
- Instruction manual
- Calibration certificate

OPTIONAL ACCESSORIES

Photo	Order No.	Acc. description
	S 1072	Continuity test lead, with crocodile clip, 2 x 2.5 m, 2 pcs
	A 1383	Temperature probe with 3 m cable
	A 1333 V2	Reference resistor 750 μΩ, Class 0,1
	A 1649 10M	Test lead, Kelvin, Extension 10M
	A 1593	Large Kelvin test clip
	A 1595	Large crocodile clip, black
	A 1596	Large crocodile clip, red

METREL D.D.

Measuring and Regulation Equipment Manufacturer
Ljubljanska 77, SI-1354 Horjul, Slovenia
T +386 (0)1 75 58 200, F +386 (0)1 75 49 226
metrel@metrel.si, www.metrel.si

Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery.
Subject to technical change without notice.