MI 3250 MicroOhm 10A







MicroOhm MI 3250 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.

MEASURING FUNCTIONS:

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

KEY FEATURES:

- Highly efficient 10 A current source generates 10 A into 200 m Ω load for 15 min without overheating.
- High overvoltage protection (CAT IV / 300 V) allows measurement in substations and other points with low line resistance.
- Internal protection cicuit protects user and instrument from inadvertent connection to lines.
- Custom limits can be set for PASS / FAIL evaluation of test result.
- 50 Hz / 60 Hz ripple detection and rejection.
- Instrument can be powered from mains or internal rechargeable battery. Instrument can be normally used while built-in fast battery charger charges the NiMh batteries.
- Large 320 x 240 dots matrix LCD offers easy-to-read results and all associated parameters.
- Lightweight portable design.
- Up to 1000 test results with timestamp can be stored in internal memory.
- PC SW HVLink PRO enables downloading, review, analyses and printing of test results.

APPLICATION:

Measurement of the resistance of:

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

STANDARDS:

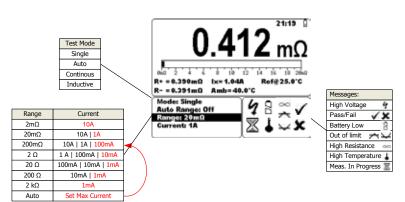
Electromagnetic compatibility: IEC 61326-1

Safety (LVD): EN 61010-1 EN 61010-031



TEST MODES:

- Manual mode is initiated by pressing the 'Test' button after connecting the test leads to the unit under test. Continuity of C1 and C2 connectors is checked. Current is applied in both forward and reverse direction.
- **Automatic mode**: test starts automatically when probes are connected. Current is applied in both forward and reverse direction.
- **Continuous mode** allows repeated measurements to be made on the same sample. The measurement is updated every three seconds.
- Inductive mode is used for measuring resistance of inductive loads like motors and generators. Instrument generates selected current in one direction and waits voltage to stabilize, before measurement is preformed. To provide safety after measurement is completed instrument is equipped with auto-discharge facility.



TECHNICAL SPECIFICATION

Function	Range	Resolution	Accuracy	Test current
Resistance	1,9999 mΩ 19,999 mΩ 199,99 mΩ 1,9999 Ω 19,999 Ω 19,999 Ω 199,99 Ω 199,99 Ω 1,9999 kΩ	0,1 μΩ 1 μΩ 10 μΩ 100 μΩ 1 mΩ 10 mΩ 10 mΩ 100 mΩ 1 Ω	$ \begin{array}{l} \pm (0.25\% \ \text{Rdg} + 0.01\% \ \text{FS}) \\ \pm (0.25\% \ \text{Rdg} + 0.01\% \ \text{FS}) \\ \pm (0.25\% \ \text{Rdg} + 0.01\% \ \text{FS}) \\ \pm (0.25\% \ \text{Rdg} + 0.01\% \ \text{FS}) \\ \pm (0.25\% \ \text{Rdg} + 0.01\% \ \text{FS}) \\ \pm (1\% \ \text{Rdg} + 0.1\% \ \text{FS}) \\ \pm (0.25\% \ \text{Rdg} + 0.01\% \ \text{FS}) \\ \pm (1\% \ \text{Rdg} + 0.25\% \ \text{FS}) \\ \pm (1\% \ \text{Rdg} + 0.25\% \ \text{FS}) \end{array} $	10 A 10 A/1 A 10 A/1 A/100 mA 1 A/100 mA/10 mA 100 mA/10 mA 1 mA 10 mA 1 mA 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:

MI 3250 Standard set

- Instrument MI 3250
- Test cable, 2.5 m, with Kelvin Clip, 2 pcs
- Test cable, 2 m, 4 pcs (2 x black, 2 x red)
- Crocodile clip, 4 pcs (2 x black, 2 x red)
- Test probe, 2 pcs (black)
- Mains cable
- USB cable
- 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. decription
(1)	S 1072	Continuity test lead, with crocodile clip, 2 x 2.5 m, 2 pcs
	A 1383	Temperature probe with 3 m cable
d	A 1333	Resistor SHUNT 750 $\mu\Omega$



Measuring and Regulation Equipment Manufacturer

METREL d.d. Ljubljanska 77 SI-1354 Horjul

Tel: + 386 (0)1 75 58 200 Fax: + 386 (0)1 75 49 226 E-mail: metrel@metrel.si http://www.metrel.si