

MI 3242 MicroOhm 2A

MI 3242 MicroOhm 2A is a portable low resistance ohmmeter used to measure low resistances of switches, relays, connectors, bus bars, power distribution cable joints, motor & generator winding, power transformers, power inductors, rail track joints, wire and cable resistance, welding joints for industrial application, etc., with test current up to 2A

MEASURING FUNCTIONS:

- Bidirectional resistance measurement from 1 $\mu\Omega$ up to 199,9 Ω with test current up to 2 A.

KEY FEATURES:

- **Four measuring modes:** Automatic, single, continuous and inductive
- **Automatic thermal EMF elimination:** with automatic bidirectional measurement.
- **Accurate:** 1 $\mu\Omega$ best resolution with 0.25% accuracy.
- **Noise rejection:** 50 Hz / 60 Hz ripple detection and rejection.
- **Battery powered:** more than 800 measurements of 500 m Ω load @ 2 A test current & 15 s measurement duration.
- **Safe:** High overvoltage protection (CAT III / 600 V) allows measurement in substations and other points with low line resistance. Internal protection circuit protects user and instrument from inadvertent connection to lines.
- **Custom limits:** Pre-programmed limits with PASS/FAIL evaluation of measurement result and bright REEN/RED indicators providing visual evaluation of the results.
- **Portable:** Lightweight portable design.
- **Memory:** Up to 1500 test results with timestamp can be stored in internal memory.
- **Downloadable:** PC SW HVLink PRO enables downloading, review, analyses and printing of test results.



APPLICATION:

- Measurement the resistance of:**
- **In inductive mode:**
 - Motor & generator winding
 - Power transformer
 - Power inductors
 - Wire & cable resistance

In resistance mode:

- Relays
- Switches
- Connectors

- Busbars
- Power distributor

STANDARDS:

Electromagnetic compatibility:
EN 61326 Class A

Safety:

EN 61010-1
EN 61010-031
EN 61010-2-30

TECHNICAL SPECIFICATION:

Function	Measuring range	Resolution	Accuracy	Current
Resistance	9.999 m Ω	1 $\mu\Omega$	$\pm(0.25\% \text{ of reading} + 2 \text{ digits})$	2 A
	99.99 m Ω	10 $\mu\Omega$		
	999.9 m Ω	100 $\mu\Omega$		
	99.99 m Ω	10 $\mu\Omega$		
	999.9 m Ω	100 $\mu\Omega$		
	100 mA	9.999 Ω		1 m Ω
		19.99 Ω		10 m Ω
		999.9 m Ω		100 $\mu\Omega$
		9.999 Ω		1 m Ω
		99.99 Ω		10 m Ω
10 mA	199.9 Ω	100 m Ω		
Voltage	0 ÷ 49.9 50 ÷ 550	0.1 V 1 V	$\pm(2\% \text{ of reading} + 2 \text{ digits})$	
Frequency	10.0 ÷ 99.9 100 ÷ 500	0.1 Hz 1 Hz	$\pm(0.2\% \text{ of reading} + 1 \text{ digit})$	
Power supply (batteries)	9 VDC (6 x 1.5 V battery or accu, size AA)			
Operation	> 800 single measurements			
Overvoltage category	CAT III / 600 V; CAT IV / 300 V			
Protection class	Double insulation			
Display	128 x 64 dots matrix display with backlight			
Communication	RS232 and USB			
Memory	1500 memory locations			
Dimensions	140 x 80 x 230 mm			
Weight	0.8 kg			

STANDARD SET:

- Instrument MI 3242 MicroOhm 2A
- Test cable 4 wire, 2.5 m
- Crocodile clip, 4 pcs (2x black, 2x red)
- Test probe, 2 pcs (black)
- Power supply adapter
- 1.2 V NiMH rechargeable battery, 6pcs
- RS232 serial cable
- USB cable
- Soft carrying bag
- PC SW HVLink PRO
- Instruction manual
- Calibration certificate



KEY FEATURES



Large analogue / digital LCD with backlight



Fast and simple adjustment of the test parameters



Test lead connection terminal and USB and RS232 communication ports.