

MI 3242 MicroOhm 2A



NEW
2 A Low resistance
ohmmeter



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:

- 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.
- 50 Hz / 60 Hz ripple detection and rejection.
- When powered from internal battery it enables more than 800 measurements of 500 m Ω load @ 2 A test current & 15 s measurement duration.
- Pre-programmed limits with PASS/FAIL evaluation of measurement result and bright GREEN/RED indicators providing visual evaluation of the results.
- Large 128 x 64 dots matrix display with backlight offers easy to read results and all associated parameters.
- Lightweight portable design.
- Up to 1500 test results with timestamp can be stored in internal memory.
- PC SW HVLink PRO enables downloading, review, analyses and printing of test results.

APPLICATION:

Measuring of 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 cable joints
- Welding joints

STANDARDS:

Electromagnetic compatibility:
EN 61326 Class A

Safety (LVD):
EN 61010-1
EN 61010-031
EN 61010-2-30

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 performed. To provide safety after measurement is completed instrument is equipped with auto-discharge facility.

TECHNICAL SPECIFICATION

| Function | Range | Resolution | Accuracy | Test current |
|------------|-------------|------------|---------------------------------|--------------|
| Resistance | 9.999 mΩ | 1 μΩ | ±(0.25 % of reading + 2 digits) | 2 A |
| | 99.99 mΩ | 10 μΩ | | |
| | 999.9 mΩ | 100 μΩ | | |
| | 99.99 mΩ | 10 μΩ | | |
| | 999.9 mΩ | 100 μΩ | | 100 mA |
| | 9.999 Ω | 1 mΩ | | |
| | 19.99 Ω | 10 mΩ | | |
| | 999.9 mΩ | 100 μΩ | | 10 mA |
| | 9.999 Ω | 1 mΩ | | |
| | 99.99 Ω | 10 mΩ | | |
| 199.9 Ω | 100 mΩ | | | |
| Voltage | 0 ÷ 49.9 | 0.1 V | ±(2 % of reading + 2 digits) | |
| | 50 ÷ 550 | 1 V | | |
| Frequency | 10.0 ÷ 99.9 | 0.1 Hz | ±(0.2 % of reading + 1 digit) | |
| | 100 ÷ 500 | 1 Hz | | |

GENERAL SPECIFICATION

| | |
|-------------------------|---|
| Power supply voltage: | 9 VDC (6 x 1.5 V battery or accu, size AA) |
| Idle state: | > 25 h |
| Measurements: | > 800 measurements of 500 mΩ load @ 2A test current & 15s measurement duration. |
| Overvoltage category: | CAT IV / 300 V; CAT III / 600 V |
| Protection degree: | IP 40 |
| Display: | 128x64 dots matrix display with backlight |
| Dimensions (w x h x d): | 140 mm x 80 mm x 230 mm |
| Weight: | 1.0 kg, without battery cells and accessories |
| Connection: | RS232 & USB |
| Memory: | 1500 storage locations (512 kB) |

ORDERING INFORMATION:

MI 3242

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, 6 pcs
- RS232 serial cable
- USB cable
- Soft carrying bag
- PC SW HVLink PRO
- Instruction manual
- Calibration certificate

OPTIONAL ACCESSORIES:

| Photo | Order No. | Acc. description |
|-------|-----------|--------------------------------|
| | A 1407 | Test cable Kelvin 500 A, 2,5 m |
| | A 1408 | Test cable Kelvin, 2,5 m |



Measuring and Regulation Equipment Manufacturer

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