

# MI 3100 s EurotestEASI

**NEW**  
Multifunctional electrical  
installation tester

**Basic  
electrical  
installation  
safety tester**



**MI 3100 s EurotestEASI is a fast, accurate and easy to use multifunctional measuring instrument which performs a basic set of installation safety tests according to IEC/EN 61557. Besides, the MI 3100 s EurotestEASI enables on-line voltage monitoring, phase sequence testing and earth resistance measurement. EurotestEASI is equipped with integrated characteristics of fuses and RCDs for PASS / FAIL evaluation of test results.**

#### Measuring functions:

- Insulation resistance with DC voltage from 50 V to 1000 V;
- Continuity of PE conductors with 200 mA test current with polarity change;
- Continuity of PE conductors with 7 mA test current without RCD tripping;
- Line impedance;
- Loop impedance;
- Loop impedance with Trip Lock RCD function;
- TRMS voltage and frequency;
- Phase sequence;
- RCD testing (general and selective, type AC, A, F);
- Earth resistance (3-wire method).

#### Key features:

- Built-in help screens for referencing on site.
- Built-in fuse tables for automatic evaluation of the line / loop impedance result.
- Monitoring of all 3 voltages in real-time.
- Automatic polarity reversal on continuity test.
- Loop impedance test without tripping the RCD.
- Built-in charger and rechargeable batteries as standard accessory.
- Automated RCD testing procedure.

#### APPLICATION

- Initial and periodic testing of domestic and industrial installations.
- Testing of single and multiphase systems.
- Testing of TT and TN supply systems.

#### STANDARDS

- Functionality:  
EN 61557
- Other reference standards for testing:  
IEC/EN 60364-4-41;  
EN 61008;  
EN 61009;  
BS 7671;  
AS/NZ 3017;
- Electromagnetic compatibility (EMC):  
EN 61326
- Safety (LVD):  
EN 61010-1;  
EN 61010-031  
EN 31010-2-030  
EN 31010-2-032

# Technical specification

| Function              |                                 | Measuring range  | Resolution                     | Accuracy  |
|-----------------------|---------------------------------|--|--------------------------------|---|
| CONTINUITY            | Test Current 7 mA 2-wire        | 0.00 Ω ... 19.99 Ω<br>20.0 Ω ... 1999 Ω  | 0.1 Ω<br>1 Ω                   | ±(5 % of r. + 5 digits)                                   |
|                       | Test Current 200 mA 2-wire      | 0.00 Ω ... 19.99 Ω<br>20.0 Ω ... 199.9 Ω<br>200.0 Ω ... 1999 Ω   | 0.01 Ω<br>0.1 Ω<br>1 Ω         | ±(3 % of r. + 3 digits)<br>±(5 % of r.)<br>±(5 % of r.)   |
| INSULATION RESISTANCE | Test Voltage 50/100/250 V       | 0.00 MΩ ... 19.99 MΩ<br>20.0 MΩ ... 99.9 MΩ<br>100.0 MΩ ... 199.9 MΩ   | 0.01 MΩ<br>0.1 MΩ              | ±(5 % of r. + 3 digits)<br>±(10 % of r.)<br>±(20 % of r.) |
|                       | Test Voltage 500/1000 V         | 0.00 MΩ ... 19.99 MΩ<br>20.0 MΩ ... 199.9 MΩ<br>200 MΩ ... 999 MΩ  | 0.01 MΩ<br>0.1 MΩ<br>1 MΩ      | ±(5 % of r. + 3 digits)<br>±(5 % of r.)<br>±(10 % of r.)  |
| RCD                   | RCD Uc                          | 0.00 V ... 19.99 V<br>20.0 V ... 99.9 V  | 0.1 V                          | (-0%/±15 %) of r. ± 10 digits<br>(-0%/±15 %) of r.        |
|                       | RCD (t),                        | 0.0 ms ... 40.0 ms<br>0.0 ms ... max.time  | 0.1 ms                         | ±1 ms<br>±3 ms  |
|                       | RCD I Ramp                      | 0.2xI <sub>ΔN</sub> ... 1.1xI <sub>ΔN</sub> (AC)<br>0.2xI <sub>ΔN</sub> ... 1.5xI <sub>ΔN</sub> (A),<br>I <sub>ΔN</sub> ≥30 mA)<br>0.2xI <sub>ΔN</sub> ... 2.2xI <sub>ΔN</sub> (A),<br>I <sub>ΔN</sub> <30 mA) | 0.05xI <sub>ΔN</sub>           | ±0.1xI <sub>ΔN</sub>                                      |
| IMPEDANCE             | Zline L-L, L-N Ip <sub>sc</sub> | 0.00 Ω ... 9.99 Ω<br>10.0 Ω ... 99.9 Ω<br>100 Ω ... 999 Ω<br>1.00 kΩ ... 9.99 kΩ   | 0.01 Ω<br>0.1 Ω<br>1 Ω<br>10 Ω | ±(5 % of r. + 5 digits)<br>±(10 % of r.)                  |
|                       | Zloop L-PE, Ip <sub>fc</sub>    | 0.00 Ω ... 9.99 Ω<br>10.0 Ω ... 99.9 Ω<br>100 Ω ... 999 Ω<br>1.00 kΩ ... 9.99 kΩ   | 0.01 Ω<br>0.1 Ω<br>1 Ω<br>10 Ω | ±(5 % of r. + 5 digits)<br>±(10 % of r.)                  |
| VOLTAGE               | TRMS                            | 0 ... 550 V  | 1 V                            | ±(2 % of r. + 2 digits)                                   |
|                       | Frequency                       | 0.00 Hz .. 9.99 Hz<br>10.0 Hz ... 499.9 Hz   | 0.01 Hz<br>0.1 Hz              | ±(0.2 % of r. + 1 digits)                                 |
| EARTH RESISTANCE      | 3 wire                          | 0.00 Ω ... 19.99 Ω<br>20.0 Ω ... 199.9 Ω<br>200.0 Ω ... 9999 Ω   | 0.01 Ω<br>0.1 Ω<br>1 Ω         | ±(5 % of r. + 5 digits)                                   |
| GENERAL               | Power supply                    | 9 VDC (6x1.5 V battery or accu, size AA)   |                                |   |
|                       | Overvoltage category            | 1000 V DC CAT II; 600 V CAT III; 300 V CAT IV  |                                |   |
|                       | Protection class                | double insulation  |                                |   |
|                       | Weight                          | 1.3 kg   |                                |   |
|                       | Size (l x h x w)                | 230 x 103 x 115 mm   |                                |   |

## Ordering information

Standard set

MI 3100 s



- Instrument EurotestEASI
- Schuko-plug test cable, 1.5 m
- Test lead, 3 x 1.5 m
- Test probe, 3 pcs (blue, black, green)
- Crocodile clip, 3 pcs (blue, black, green)
- Power supply adapter + 6 NiMH rechargeable batteries, size AA
- Soft carrying neck belt
- Soft carrying bag
- Short instruction manual
- Instruction manual on CD
- Handbook on CD
- Calibration certificate

## Optional accessories

| Photo | Order No. | Description  |
|-------|-----------|--|
|       | A 1110    | Three phase adapter  |
|       | A 1111    | Three phase adapter with switch                                    |
|       | A 1201    | Insulated rod for CONTINUITY measurement                           |
|       | A 1202    | Additional extension part for A 1201                               |
|       | A 1164    | Test lead, black, 50 m   |
|       | A 1153    | Test lead, black, 20 m   |
|       | A 1154    | Test lead, black, 4 m  |
|       | A 1198    | Magnetic contact probe   |
|       | A 1160    | Fast charger for 8 AA batteries with a set of 6 NiMH bat., type AA |
|       | S 2026    | Earth test set, 3-wire, 20 m                                       |
|       | S 2027    | Earth test set, 3-wire, 50 m                                       |



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

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