

# MI 3100 SE EASI



**NEW**  
Multifunctional electrical  
installation tester

**AUTO SEQUENCE®**  
tester with  
**TN and TT**  
earthing systems support



MI 3100 SE EASI is a fast, accurate and easy to use multifunctional measuring instrument which performs a complete set of installation safety tests according to IEC/EN 61557. Besides, the MI 3100 SE EASI enables on-line voltage monitoring, phase sequence testing and earth resistance measurement. EASI is equipped with integrated characteristics of fuses and RCDs for PASS / FAIL evaluation of test results. All the results can be quickly saved and referenced on the instrument and then downloaded via the MESM software (included in the standard set) to the computer for evaluation and report generation after testing.

#### 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:

- Predefined mini AUTOSEQUENCES:  
**Auto TT (U, Zln, Zs, Uc);**  
**Auto TN/RCD (U, Zln, Zs, Rpe);**  
**Auto TN (U, Zln, Zlpe, Rpe).**
- 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.
- BT communication with PC, Android tablets and smart phones via BT dongle.
- PC SW EuroLink PRO for downloading of test results and report creation.
- EuroLink Android APP, data management tool (option).

#### 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 20.0 Ω ... 1999 Ω	0.1 Ω 1 Ω	±(5 % of r. + 5 digits)
	Test Current 200 mA 2-wire	0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200.0 Ω ... 1999 Ω	0.01 Ω 0.1 Ω 1 Ω	±(3 % of r. + 3 digits) ±(5 % of r.) ±(5 % of r.)
INSULATION RESISTANCE	Test Voltage 50/100/250 V	0.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 99.9 MΩ 100.0 MΩ ... 199.9 MΩ	0.01 MΩ 0.1 MΩ	±(5 % of r. + 3 digits) ±(10 % of r.) ±(20 % of r.)
	Test Voltage 500/1000 V	0.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 199.9 MΩ 200 MΩ ... 999 MΩ	0.01 MΩ 0.1 MΩ 1 MΩ	±(5 % of r. + 3 digits) ±(5 % of r.) ±(10 % of r.)
RCD	RCD Uc	0.00 V ... 19.99 V 20.0 V ... 99.9 V	0.1 V	(-0%/±15 %) of r. ± 10 digits (-0%/±15 %) of r.
	RCD (t),	0.0 ms ... 40.0 ms 0.0 ms ... max.time	0.1 ms	±1 ms ±3 ms
	RCD I Ramp	0.2xI <sub>ΔN</sub> ... 1.1xI <sub>ΔN</sub> (AC) 0.2xI <sub>ΔN</sub> ... 1.5xI <sub>ΔN</sub> (A), I <sub>ΔN</sub> ≥30 mA) 0.2xI <sub>ΔN</sub> ... 2.2xI <sub>ΔN</sub> (A), I <sub>ΔN</sub> <30 mA)	0.05xI <sub>ΔN</sub>	±0.1xI <sub>ΔN</sub>
IMPEDANCE	Zline L-L, L-N Ipsc	0.00 Ω ... 9.99 Ω 10.0 Ω ... 99.9 Ω 100 Ω ... 999 Ω 1.00 kΩ ... 9.99 kΩ	0.01 Ω 0.1 Ω 1 Ω 10 Ω	±(5 % of r. + 5 digits) ±(10 % of r.)
	Zloop L-PE, IpfC	0.00 Ω ... 9.99 Ω 10.0 Ω ... 99.9 Ω 100 Ω ... 999 Ω 1.00 kΩ ... 9.99 kΩ	0.01 Ω 0.1 Ω 1 Ω 10 Ω	±(5 % of r. + 5 digits) ±(10 % of r.)
VOLTAGE	TRMS	0 ... 550 V	1 V	±(2 % of r. + 2 digits)
	Frequency	0.00 Hz .. 9.99 Hz 10.0 Hz ... 499.9 Hz	0.01 Hz 0.1 Hz	±(0.2 % of r. + 1 digits)
EARTH RESISTANCE	3 wire	0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200.0 Ω ... 9999 Ω	0.01 Ω 0.1 Ω 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		
	COM port	USB, RS232		
	Weight	1.3 kg		
	Size (l x h x w)	230 x 103 x 115 mm		

## Ordering information

Standard set

MI 3100 SE



- Instrument MI 3100 SE EASI
- Mains-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
- RS232 - PS/2 cable
- USB cable
- Soft carrying neck belt
- Soft carrying bag
- PC Software MESM
- Short instruction manual
- Instruction manual on CD
- Handbook on CD
- Calibration certificate

## Optional accessories

Photo	Order No.	Description
	A 1401	Tip commander (3-wire)
	A 1314	Plug commander
	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 1292	Upgrade code EuroLink PRO to EuroLink PRO Plus
	A 1431	EuroLink Android APP
	A 1436	BT dongle
	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

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



**METREL®**

Measuring and Regulation Equipment Manufacturer

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