

# 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, TN and IT supply systems.
- Medical installation testing.

#### 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 $\Omega$ ... 19.99 $\Omega$ 20.0 $\Omega$ ... 1999 $\Omega$	0.1 $\Omega$ 1 $\Omega$	$\pm(5\% \text{ of } r. + 5 \text{ digits})$
	Test Current 200 mA 2-wire	0.00 $\Omega$ ... 19.99 $\Omega$ 20.0 $\Omega$ ... 99.9 $\Omega$ 100.0 $\Omega$ ... 1999 $\Omega$	0.01 $\Omega$ 0.1 $\Omega$ 1 $\Omega$	$\pm(3\% \text{ of } r. + 3 \text{ digits})$ $\pm(5\% \text{ of } r.)$ $\pm(5\% \text{ of } r.)$
INSULATION RESISTANCE	Test Voltage 50/100/250 V	0.00 M $\Omega$ ... 19.99 M $\Omega$ 20.0 M $\Omega$ ... 99.9 M $\Omega$ 100.0 M $\Omega$ ... 199.9 M $\Omega$	0.01 M $\Omega$ 0.1 M $\Omega$	$\pm(5\% \text{ of } r. + 3 \text{ digits})$ $\pm(10\% \text{ of } r.)$ $\pm(20\% \text{ of } r.)$
	Test Voltage 500/1000 V	0.00 M $\Omega$ ... 19.99 M $\Omega$ 20.0 M $\Omega$ ... 99.9 M $\Omega$ 200 M $\Omega$ ... 999 M $\Omega$	0.01 M $\Omega$ 0.1 M $\Omega$ 1 M $\Omega$	$\pm(5\% \text{ of } r. + 3 \text{ digits})$ $\pm(5\% \text{ of } r.)$ $\pm(10\% \text{ of } r.)$
RCD	RCD U <sub>c</sub>	0.00 V ... 19.99 V 20.0 V ... 99.9 V	0.1 V	$(-0\%/\pm 15\%) \text{ of } r. \pm 10 \text{ digits}$ $(-0\%/\pm 15\%) \text{ of } r.$
	RCD (t) <sub>i</sub>	0.00 ms ... 40.0 ms 0.0 V ... max.time	0.1 ms	$\pm 1 \text{ ms}$ $\pm 3 \text{ ms}$
	RCD I Ramp	0.2xI <sub>AN</sub> ... 1.1xI <sub>AN</sub> (AC) 0.2xI <sub>AN</sub> ... 1.5xI <sub>AN</sub> (A), I <sub>AN</sub> $\geq 30 \text{ mA}$ 0.2xI <sub>AN</sub> ... 2.2xI <sub>AN</sub> (A), I <sub>AN</sub> < 30 mA	0.05xI <sub>AN</sub>	$\pm 0.1 \text{ I}_{AN}$
IMPEDANCE	Zline L-L, L-N Ip <sub>sc</sub>	0.00 $\Omega$ ... 9.99 $\Omega$ 10.0 $\Omega$ ... 99.9 $\Omega$ 100 $\Omega$ ... 999 $\Omega$ 1.00 k $\Omega$ ... 9.99 k $\Omega$	0.01 $\Omega$ 0.1 $\Omega$ 1 $\Omega$ 10 $\Omega$	$\pm(5\% \text{ of } r. + 5 \text{ digits})$ $\pm(10\% \text{ of } r.)$
	Zloop L-PE, Ip <sub>fc</sub>	0.00 $\Omega$ ... 9.99 $\Omega$ 10.0 $\Omega$ ... 99.9 $\Omega$ 100 $\Omega$ ... 999 $\Omega$ 1.00 k $\Omega$ ... 9.99 k $\Omega$	0.01 $\Omega$ 0.1 $\Omega$ 1 $\Omega$ 10 $\Omega$	$\pm(5\% \text{ of } r. + 5 \text{ digits})$ $\pm(10\% \text{ of } r.)$
VOLTAGE	TRMS	0 ... 550 V	1 V	$\pm(2\% \text{ of } r. + 2 \text{ digits})$
	Frequency	0.00 Hz ... 9.99 Hz 10.0 Hz ... 499.9 Hz	0.01 Hz 0.1 Hz	$\pm(0.2\% \text{ of } r. + 1 \text{ digits})$
EARTH RESISTANCE	3 wire	0.00 M $\Omega$ ... 19.99 $\Omega$ 20.0 M $\Omega$ ... 199.9 $\Omega$ 200.0 M $\Omega$ ... 9999 $\Omega$	0.01 $\Omega$ 0.1 $\Omega$ 1 $\Omega$	$\pm(5\% \text{ of } r. + 5 \text{ digits})$
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	BT, USB, RS232		
	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

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



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