

Multifunctional installation testers

MI 3100B SE EurotestEASI



MI 3100B SE EurotestEASI 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 3100B SE 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. All the results can be quickly saved and referenced on the instrument and then downloaded via the EuroLink PRO 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, B, B+, MI RCD, EV RCD, PRCD, PRCD-K, PRCD-S);
- Earth resistance (3-wire method).

KEY FEATURES

- **Predefined mini AUTO SEQUENCE[®] s:**
 - Auto TT (U, ZIn, Zs, Uc);
 - Auto TN/RCD (U, ZIn, Zs, Rpe);
 - Auto TN (U, ZIn, Zlpe, Rpe).
- **Built-in help screens** for referencing on site.
- **Built-in fuse tables** for automatic evaluation of the line / loop impedance result.
- **On-line voltage monitoring:** monitors all 3 voltages in real-time.
- **Polarity swap:** automatic polarity reversal on continuity test.
- **Trip Lock function:** loop impedance test without tripping the RCD.
- **Built-in charger** unit has a built-in charging circuit and comes complete with a set of rechargeable NiMH batteries.
- **RCD auto:** automated RCD testing procedure.
- **Bluetooth communication** with PC, Android tablets and smart phones via optional 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

- IEC/EN 61557

Other reference standards for testing

- IEC/EN 60364-4-41;
- EN 61008;
- EN 61009;
- BS 7671;
- AS/NZ 3017

Electromagnetic compatibility

- EN 61326

Safety

- 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 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 ... 99.9 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	Contact voltage	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.	
	Trip out time	0.0 ms ... 40.0 ms 0.0 ms ... max.time	0.1 ms	±1 ms ±3 ms	
	Trip out current	0.2xI _{ΔN} ... 1.1xI _{ΔN} (AC) 0.2xI _{ΔN} ... 1.5xI _{ΔN} (A, I _{ΔN} ≥30 mA) 0.2xI _{ΔN} ... 2.2xI _{ΔN} (A, I _{ΔN} <30 mA) 0.2xI _{ΔN} ... 2.2xI _{ΔN} (B)	0.05xI _{ΔN}	±0.1xI _{ΔN}	
IMPEDANCE	Zline L-L, L-N Ip _{sc}	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, Ip _{fc}	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		CAT II / 1000 V _{DC} ; CAT III / 600 V; CAT IV / 300 V			
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				

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ORDERING INFORMATION



Standard set (MI 3100B SE)

- 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
- RS232 - PS/2 cable
- USB cable
- Soft carrying neck belt
- Soft carrying bag
- PC Software EuroLink PRO
- Short instruction manual
- Instruction manual on storage media
- Handbook on storage media
- Calibration certificate

OPTIONAL ACCESSORIES

Photo	Order No.	Acc. description
	A 1401	Tip commander (3-wire)
	A 1314	Plug commander
	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
	S 2026	Earth test set, 3-wire, 20 m
	S 2027	Earth test set, 3-wire, 50 m
	A 1110	Three phase adapter
	A 1111	Three phase adapter with switch
	A 1436	BT dongle