

**NEW**  
Multifunctional electrical  
installation tester

# MI 3102 BT EurotestXE



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



**MI 3102 BT EurotestXE** is a multifunctional measuring instrument which performs a complete set of installation safety tests according to IEC/EN 61557. It supports **AUTO SEQUENCE®** testing of the TN, TT and IT earthing systems. ISFL measurements and the IMD tests can be performed. Besides, the MI 3102 BT EurotestXE enables on-line voltage monitoring, phase sequence testing, earth resistance measurement, illuminance measurement and TRMS current measurement. EurotestXE 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 DC test current with polarity change;
- Continuity of PE conductors with 7 mA test current without RCD tripping;
- Line/Loop impedance;
- Loop impedance with Trip Lock RCD function;
- TRMS voltage and frequency;
- Phase sequence;
- Power and harmonics;
- RCD testing (general and selective, type AC, A, F, B, B+);
- Earth resistance (3-wire and 2-clamps method);
- Specific earth resistance with Ro-adapter (option);
- TRMS leakage and load currents (option);
- First fault leakage current (ISFL);
- Testing of Insulation Monitoring Devices (IMDs);
- Illumination (option).

#### Key features:

- Predefined mini AUTOSEQUENCEs:  
**Auto TT (U, ZIn, Zs, Uc);**  
**Auto TN/RCD (U, ZIn, Zs, Rpe);**  
**Auto TN (U, ZIn, Zlpe, Rpe);**  
**Auto IT (U, ZIn, Isc, Isfl, IMD).**
- Power measurements and harmonics analysis
- 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 built-in BT.
- 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, TN and IT earthing systems.
- Medical installation testing.

#### STANDARDS

- Functionality:  
EN 61557  
DIN 5032
- Other reference standards for testing:  
IEC/EN 60364-4-41;  
EN 61008;  
EN 61009;  
BS 7671;  
AS/NZ 3017;  
CEI 64.8;  
HD 384;  
VDE 413
- 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 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	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>AN</sub> ... 1.1xI <sub>AN</sub> (AC) 0.2xI <sub>AN</sub> ... 1.5xI <sub>AN</sub> (A), I <sub>AN</sub> ≥30 mA) 0.2xI <sub>AN</sub> ... 2.2xI <sub>AN</sub> (A), I <sub>AN</sub> <30 mA) 0.2xI <sub>AN</sub> ... 2.2xI <sub>AN</sub> (B)	0.05xI <sub>AN</sub>	±0.1xI <sub>AN</sub>
IMPEDANCE	Zline L-L, L-N Ipsc	0.00 Ω ... 9.99 Ω 10.0 Ω ... 99.9 Ω 100.0 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 100.0 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)
CURRENT	TRMS, AC with A1018	0.0 mA ... 99.9 mA 100 mA ... 999 mA 1.00 A ... 19.99 A	0.1 mA 1 mA 0.01 A	±(5 % of r. + 5 digits) ±(3 % of r. + 3 digits) ±(3 % of r.)
	TRMS, AC with A1019	0.0 mA ... 99.9 mA 100 mA ... 999 mA 1.00 A ... 19.99 A	0.1 mA 1 mA 0.01 A	indicative ±(5 % of r.) ±(3 % of r.)
	TRMS, AC/DC with A1391, range=40A	0.00 A ... 1.99 A 2.00 A ... 19.99 A 20.0 A ... 39.9 A	0.01 A 0.01 A 0.1 A	±(3 % of r. + 3 digits) ±(3 % of r.) ±(3 % of r.)
	TRMS, AC/DC with A1391, range = 300A	0.00 A ... 19.99 A 20.0 A ... 39.9 A 40.0 A ... 299.9 A	0.01 A 0.1 A 0.1 A	indicative ±(3 % of r. + 5 digits)
	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)
EARTH RESISTANCE	2 clamp	0.00 Ω ... 19.99 Ω 20.0 Ω ... 30.0 Ω 30.1 Ω ... 99.9 Ω	0.01 Ω 0.1 Ω 0.1 Ω	±(10 % of r. + 10 digits) ±(20 % of r.) ±(30 % of r.)
	Specific earth resistance	0.0 Ωm ... 99.9 Ωm 100 Ωm ... 999 Ωm 1.00 MΩm ... 9.99 kΩm 10.0 MΩm ... 99.9 kΩm	0.1 Ωm 1 Ωm 0.01 kΩm 0.1 kΩm	±(5 % of r.) for Re 1 Ω ... 1999Ω ±(10 % of r.) for Re 2 kΩ ... 19.99kΩ ±(20 % of r.) for Re > 20 kΩ
FIRST FAULT LEAKAGE CURRENT		0.0 mA ... 19.9 mA	0.1 mA	±(5 % of r. + 3 digits)
IMD TEST	Threshold indicative insulation resistance	5 ... 640 kΩ	5 kΩ	Indicative values, up to 128 steps
ILLUMINANCE	Type B	0.01 lux ... 19.99 lux 20.0 lux ... 199.9 lux 200 lux ... 1999 lux 2.00 klux ... 19.99 klux	0.01 lux 0.1 lux 1 lux 10 lux	±(5 % of r. + 2 digits) ±(5 % of r.)
	Type C	0.01 lux ... 19.99 lux 20.0 lux ... 199.9 lux 200 lux ... 1999 lux 2.00 klux ... 19.99 klux	0.01 lux 0.1 lux 1 lux 10 lux	±(10 % of r. + 3 digits) ±(10 % of r.)
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		



Measuring and Regulation Equipment Manufacturer  
 METREL d.d.  
 Ljubljanska 77  
 SI-1354 Horjul  
 Tel: + 386 (01) 75 58 200  
 Fax: + 386 (01) 75 49 226  
 E-mail: metrel@metrel.si  
 http://www.metrel.si

## Ordering information

Standard set

MI 3102 BT



- Instrument EurotestXE
- Plug commander, 1.5 m
- Test lead, 3 x 1.5 m
- Earth test set, 3-wire, 20 m (test lead, 4 m; 2 x test lead, 20 m; 2 x test rod)
- Power supply adapter + 6 NiMH rechargeable batteries, size AA
- PC Software EuroLink PRO
- Test probe, 3 pcs (blue, black, green)
- Crocodile clip, 3 pcs (blue, black, green)
- RS232 - PS/2 cable
- USB cable
- 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 1401	Tip commander (3-wire)
	A 1018	Current clamp (low range, leakage)
	A 1019	Current clamp
	A 1391	AC/DC Current clamp
	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 1172	Luxmeter sensor, type B (PS/2)
	A 1173	Luxmeter sensor, type C (PS/2)
	A 1153	Test lead, black, 20 m
	A 1431	EuroLink Android APP
	A 1292	Upgrade code EuroLink PRO to EuroLink PRO Plus
	A 1160	Fast charger for 8 AA batteries with a set of 6 NiMH bat., type AA
	S 2027	Earth test set, 3-wire, 50 m
	A 1199	Ro-adapter

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

# Diensten van EURO-INDEX

**EURO-INDEX is fabrikant, importeur en distributeur van diverse A-merken op het gebied van test- en meetinstrumenten. Daarnaast leveren wij een groot aantal diensten om het gebruik van deze instrumenten in uw bedrijfsvoering te optimaliseren. Dit omvat uiteraard onderhoud, reparatie en kalibratie van de instrumenten, maar ook kennisdeling via EURO-INDEX Academy en verhuur van instrumenten.**

## Geautoriseerd Service Centrum

EURO-INDEX b.v. is van alle vertegenwoordigde merken een Geautoriseerd Service Centrum. Dit betekent dat uw instrumenten worden behandeld door technici die zijn opgeleid door de fabrikant en beschikken over de juiste gereedschappen en software. Er worden uitsluitend originele onderdelen toegepast en de garantie van uw instrument, evenals de certificering (ATEX, EN50379, etc.) blijven intact.



## Kalibratielaboratorium

Het laboratorium in Nederland beschikt over een RvA accreditatie naar EN-ISO/IEC 17025. Deze accreditatie geldt voor grootheden, zoals gespecificeerd in de scope bij accreditatienummer K105. RvA kalibratiecertificaten zijn internationaal geaccepteerd en is gelijkwaardig aan BELAC.



## Mobiele Service

Naast de vaste kalibratielaboratoria in Zaventem en Capelle aan den IJssel beschikken wij ook over een laboratorium op wielen met de naam "Mobiele Service". Dit biedt vertrouwde service en kwaliteit, bij u voor de deur!

## KWS®

KWS® is een uniek servicesysteem voor uw meetinstrumenten met periodiek onderhoud en kalibratie tegen vaste, lage kosten. Via een gratis webportal ([mijnkws.be](http://mijnkws.be)) heeft u altijd en overal beschikking over uw kalibratiecertificaten.

## Verhuur van meetinstrumenten

- Uitgebreid assortiment
- Nauwkeurigheid aantoonbaar door actueel kalibratiecertificaat
- Deskundig advies
- Complete levering inclusief accessoires

## EURO-INDEX Academy

- Trainingen, seminars en workshops
- Demonstratie- en instructievideo's
- Application notes



Servicebalie



Onderhoud, reparatie en kalibratie



Trainingen en seminars



Mobiele Service

Wijzigingen voorbehouden EURO-INDEX® VL 23001



BELGIË

Leuvensesteenweg 607  
1930 Zaventem  
T: 02 - 757 92 44  
F: 02 - 757 92 64  
[sales@euro-index.be](mailto:sales@euro-index.be)  
[www.euro-index.be](http://www.euro-index.be)

NEDERLAND

Rivium 2e straat 12  
2909 LG Capelle a/d IJssel  
T: +31 - (0)10 - 2 888 000  
F: +31 - (0)10 - 2 888 010  
[verkoop@euro-index.nl](mailto:verkoop@euro-index.nl)  
[www.euro-index.nl](http://www.euro-index.nl)

