

MI 3152 InstalTestXC

Multifunctional electrical installation tester



MI 3152 InstalTestXC is an instrument from the new generation of Metrel's multifunctional measuring instruments. The already well known functions like complete installation safety testing according to AS/NZ 3017 and AUTO SEQUENCE testing of TN, TT and IT earthing systems are managed by a completely new user interface based on large colour touch screen display. A wide range of functions is included: from on-line voltage monitoring, phase sequence testing, varistor testing, earth resistance measurement, illuminance measurement and TRMS current measurement up to RCD tests, line and loop impedance tests, earth resistance measurements as well as ISFL measurements and the IMD tests.



MEASURING FUNCTIONS

- Insulation resistance with DC voltage from 50 V to 1000 V;
- **Varistor test;**
- 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 combined also in one function **Z AUTO;**
- Loop impedance with Trip Lock RCD function;
- TRMS voltage and frequency;
- Phase sequence;
- Power and (up to the 12th harmonic);
- RCD testing (general and selective, type AC, A, F, B, B+);
- Earth resistance (3-wire and 2-clamps method);
- Specific earth resistance with Ro-adaptor (option);
- TRMS leakage and load currents (option);
- First fault leakage current (ISFL);
- Testing of Insulation Monitoring Devices (IMDs);
- Illumination (option);
- High resolution Loop impedance (mΩ) (option);
- Determining location of cables (option);
- Added QR and/or barcode scanner support (option).

KEY FEATURES

- **Predefined profile dependent AUTOSEQUENCES.**
- Predefined **Automatic tests:**
- Auto TT (U, Zln, Zs, Uc);
- Auto TN/RCD (U, Zln, Zs, Rpe);
- Auto TN (U, Zln, Zlpe, Rpe);
- Auto IT (U, Zln, Isc, Isfl, IMD).
- **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.
- Automated RCD testing procedure.
- **Automated Impedance** testing procedure.
- Added functional inspections.
- Added possibility of filtering available measurements according to the selected area group.
- Built-in charger and rechargeable batteries as standard accessory.
- **BT communication** with PC, Android tablets and smart phones via built-in BT.
- **PC SW Metrel ES Manager** for creation of test structures and uploading, downloading of test results and report creation.
- **Support for aMESM Android APP**, data management tool (option).

APPLICATION

- Testing on high and low frequency installations e.g. testing in aviation, railway networks etc;
- Testing of single and multiphase systems;
- Testing of TT, TN and IT systems;
- High volume testing (industrial, aircraft, railway, mining, chemistry, ferry boat);
- Medical installation testing
- Electrical Vehicle Supply Equipment testing.

STANDARDS

Functionality: EN 61557

Other reference standards for testing:

- IEC/EN/HD 60364-4-41;
- IEC/EN 61008; IEC/EN 61009;
- BS 7671; AS/NZ 3017; DIN 5032

Electromagnetic compatibility (EMC):

- IEC/EN 61326-1

Safety:

- IEC/EN 61010-1; IEC/EN 61010-031;
- IEC/EN 61010-2-030;
- IEC/EN 61010-2-032

Function		Measuring range	Resolution	Accuracy
CONTINUITY	Test Current 7 mA 2-wire	0.00 Ω ... 19.99 Ω	0.1 Ω	±(5 % of r. + 3 digits)
		20.0 Ω ... 1999 Ω	1 Ω	
	Test Current 200 mA 2-wire	0.00 Ω ... 19.99 Ω	0.01 Ω	±(3 % of r. + 3 digits)
20.0 Ω ... 199.9 Ω		0.1 Ω	±(5 % of r.)	
INSULATION RESISTANCE	Test Voltage 50/100/250 V	0.00 MΩ ... 19.99 MΩ	0.01 MΩ	±(5 % of r. + 3 digits)
		20.0 MΩ ... 99.9 MΩ	0.1 MΩ	±(10 % of r.)
	Test Voltage 500/1000 V	100.0 MΩ ... 199.9 MΩ	0.1 MΩ	±(20 % of r.)
		0.00 MΩ ... 19.99 MΩ	0.01 MΩ	±(5 % of r. + 3 digits)
RCD	RCD Uc	0.00 MΩ ... 199.9 MΩ	0.1 MΩ	±(5 % of r.)
		20.0 MΩ ... 999 MΩ	1 MΩ	±(10 % of r.)
RCD I Ramp	RCD (t), 0.0 V ... max.time	0.00 V ... 19.99 V	0.1 V	(-0%/+15 %) of r. ±10 digits
		20.0 V ... 99.9 V	0.1 V	(-0%/+15 %) of r.
	0.00 ms ... 40.0 ms	0.1 ms	±1 ms	
IMPEDANCE	Zline L-L, L-N Ipfc	0.0 V ... 19.99 V	0.05xIΔN	±0.1xIΔN
		20.0 V ... 99.9 V	0.05xIΔN (AC)	
		100.0 V ... 199.9 V	0.05xIΔN (A), IΔN ≥30 mA	
Zloop L-PE, Ipfc	0.00 Ω ... 9.99 Ω	0.00 Ω ... 9.99 Ω	0.01 Ω	±(5 % of r. + 5 digits)
		10.0 Ω ... 99.9 Ω	0.1 Ω	±(10 % of r.)
	100 Ω ... 999 Ω	1 Ω	±(10 % of r.)	
VOLTAGE	TRMS	0.00 Ω ... 9.99 Ω	0.01 Ω	±(5 % of r. + 5 digits)
		10.0 Ω ... 99.9 Ω	0.1 Ω	±(10 % of r.)
	100 Ω ... 999 Ω	1 Ω	±(10 % of r.)	
CURRENT	TRMS, AC with A 1018	0.00 Ω ... 9.99 Ω	0.01 Ω	±(5 % of r. + 5 digits)
		10.0 Ω ... 99.9 Ω	0.1 Ω	±(10 % of r.)
	100 Ω ... 999 Ω	1 Ω	±(10 % of r.)	
EARTH RESISTANCE	3 wire	0.00 Ω ... 19.99 Ω	0.01 Ω	±(5 % of r. + 5 digits)
		20.0 Ω ... 199.9 Ω	0.1 Ω	±(5 % of r. + 5 digits)
	200.0 Ω ... 9999 Ω	1 Ω	±(5 % of r. + 5 digits)	
FIRST FAULT LEAKAGE CURRENT	2 clamp	0.00 Ω ... 19.99 Ω	0.01 Ω	±(10 % of r. + 10 digits)
		20.0 Ω ... 30.0 Ω	0.1 Ω	±(20 % of r.)
	30.1 Ω ... 39.9 Ω	0.1 Ω	±(30 % of r.)	
IMD TEST	Specific earth resistance	0.00 Ω ... 19.99 Ω	0.01 Ω	±(5 % of r.) for Re 1 Ω ... 1999kΩ
		20.0 Ω ... 199.9 Ω	0.1 Ω	±(10 % of r.) for Re 2 kΩ ... 19.99kΩ
	100 Ω ... 999 Ω	1 Ω	±(20 % of r.) for Re > 20 kΩ	
ILLUMINANCE	Type B	0.00 Ω ... 19.99 Ω	0.01 Ω	±(5 % of r. + 3 digits)
		20.0 Ω ... 199.9 Ω	0.1 Ω	±(5 % of r. + 3 digits)
	200 Ω ... 1999 Ω	1 Ω	±(5 % of r.)	
GENERAL	Type C	0.00 Ω ... 19.99 Ω	0.01 Ω	±(10 % of r. + 3 digits)
		20.0 Ω ... 199.9 Ω	0.1 Ω	±(10 % of r.)
	200 Ω ... 1999 Ω	1 Ω	±(10 % of r.)	
GENERAL	Power supply	0.00 Ω ... 19.99 Ω	0.01 Ω	±(5 % of r. + 3 digits)
	Overvoltage category	20.0 Ω ... 199.9 Ω	0.1 Ω	±(5 % of r. + 3 digits)
	Protection class	200 Ω ... 1999 Ω	1 Ω	±(5 % of r.)
	COM port	2.00 klux ... 19.99 klux	10 lux	±(5 % of r.)
	Weight	0.01 lux ... 19.99 lux	0.01 lux	±(10 % of r. + 3 digits)
GENERAL	Size (L x H x W)	20.0 lux ... 199.9 lux	0.1 lux	±(10 % of r.)
		200 lux ... 1999 lux	1 lux	±(10 % of r.)
	Size (L x H x W)	2.00 klux ... 19.99 klux	10 lux	±(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		
GENERAL	Size (L x H x W)	230 x 103 x 115 mm		
		230 x 103 x 115 mm		
	Size (L x H x W)	230 x 103 x 115 mm		

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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Standard set MI 3152 InstalTest XC

- Instrument MI3152 Instaltest XC
- Mains measuring cable, 1.5m (AU PLUG)
- Test lead, 1.5m (brown, blue, green)
- Test probe, 3 pcs (brown, blue, green)
- Crocodile clip, 3 pcs (brown, blue, green)
- Test lead, green, 20m
- USB cable
- RS232-PS/2 cable
- AC adaptor (charger)
- NIMH rechargeable batteries, AA, 6 pcs
- Soft carry bag
- Soft carrying neck belt
- Quick guide manual
- ES Manager BASIC reporting software (download)
- Calibration certificate

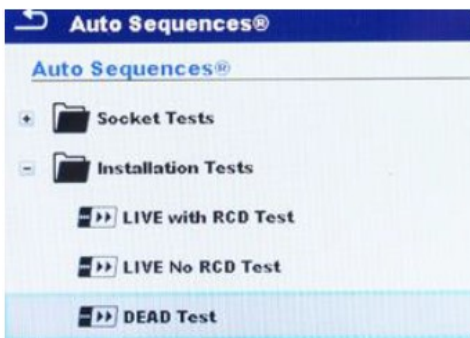
Optional Accessories

Photo	Order No.	Description
	S 2027	Earth test set ,3-wire, 50m
	A 1143	Euro Z 290A
	A 1199	Ro-adaptor
	A 1191	Receiver R10k
	A 1018	Current clamp (low range, leakage)
	A 1019	Current clamp
	MI-TPI-20A-4-20A	4 pin, 20A three phase adaptor
	MI-TPI-20A-5-20A	5 pin, 20A three phase adaptor
	MI-TPI-32A-4-32A	4 pin, 32A three phase adaptor
	MI-TPI-32A-5-32A	5 pin, 32A three phase adaptor
	A 1172	Luxmeter sensor type B (PS/2)
	A 1173	Luxmeter sensor, Type C (PS/2)
	A 1401 BLK	Tip Commander
	4087363	Bluetooth scanner
	A 1195	Resistor box

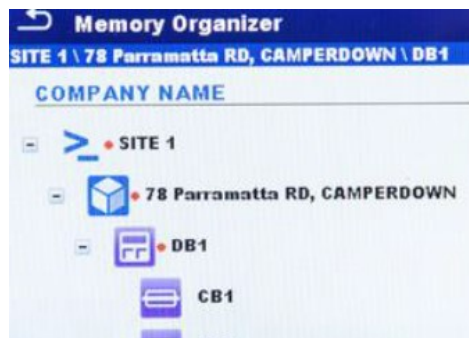
MI 3152 InstalTest XC - Features and Overview



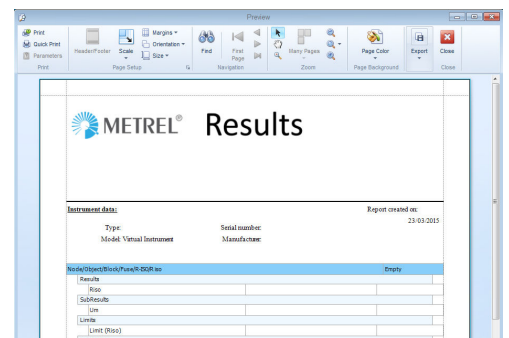
The MI 3152 Instaltest XC is a revolutionary touch screen multifunction installation tester for live and dead installation testing, verification and diagnosis, as well as high volume RCD testing with scanning of asset IDs with an optional Bluetooth scanner. The testers intuitive smartphone like interface can be operated via the colour touch screen or the tactile buttons, menus are easily navigated and test results are clear and easy to save for later assessment with the PC software Metrel ES manager. You can also use the optional aMESM android app to



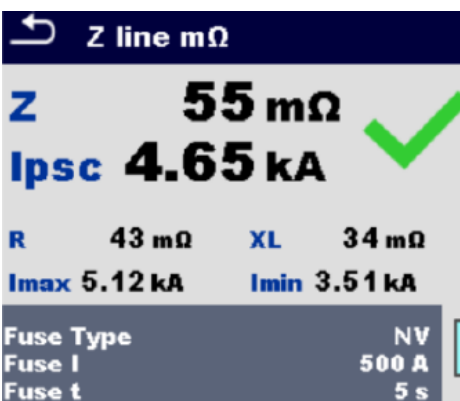
Auto Sequences combine several single tests into a single key press operation



Unique Tree-Structure for organising test sites and results in the memory organiser



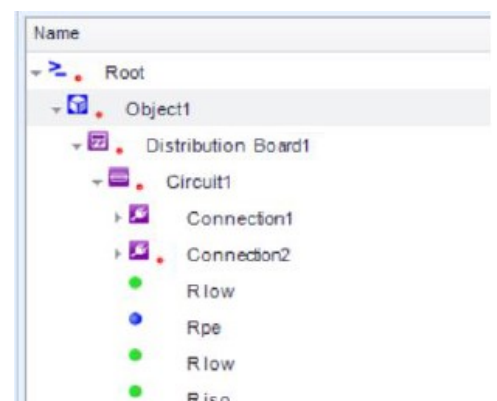
Create pdf printouts with test results using included Metrel ES Manager



Inbuilt limits to Australian standards AS/NZS3017



Many optional accessories like current clamps for leakage and conductive loops



The PC software can be used for setting up and organising installation structures

YOU MAY ALSO WANT TO CONSIDER:

The NEW MI3155 Instaltest XD is Metrel's flagship model multifunction electrical installation tester, it offers all the same excellent features of the MI3152 along with some additional key features such as auto sequence customisation, large li-ion battery pack, pro upgrade license for the Metrel ES manager software, extra test functions and more!

