

MI 2086 Eurotest 61557

The MI 2086 Eurotest 61557 performs complete testing of electrical installations and enables a number of additional features including TRMS current measurement, 4-wire / one clamp / two clamps earth resistance and 4-wire specific earth resistance measurements, illumination measurement and fuse / fault locator function. The handling of the instrument is simple and clear. Each test has its own individual help screen describing how to connect the instrument into the installation and how to perform a measurement. All the results can be saved on the instrument and then downloaded with the help of the EuroLink LITE software to the computer for evaluation and report generation after testing. The MI 2086 Eurotest 61557 performs continuity, insulation, RCD, loop, line, voltage, frequency, earth resistance and phase sequence testing required by the EN 61557 standard.

MEASURING FUNCTIONS:

- Insulation resistance with DC voltage.
- Continuity of PE conductors with 200 mA test current with polarity change.
- Continuity of PE conductors with 7 mA test current (continuous measurement) without RCD tripping.
- Line impedance.
- Loop impedance.
- Loop resistance with Trip Lock function.
- Voltage and frequency.
- Phase sequence.
- RCD testing (general and selective, type AC and A).
- Earth resistance (4-wire method, one clamp method, two clamps method).
- Specific earth resistance.
- TRMS leakage and load currents.
- Overvoltage protection devices testing.
- Illumination (option).
- Tracing the installations (option).
- High resolution loop impedance (mΩ).



KEY FEATURES:

- **Fuse location:** function enables the locating of fuses / wires / faults with the help of the optional A 1005 Fuse locator.
- **Earth resistance measurement:** instrument performs 4-wire earth resistance measurement with two additional rods; 4-wire earth resistance measurement in combination with an additional current clamp; earth resistance measurement with 2 current clamps without breaking the loop and 4-wire specific earth resistance measurement.
- **Downloadable:** downloads via RS232 cable directly to the PC with the help of the software included in the standard set.

- **Help screens:** instrument comes complete with built-in help screens for referencing on site.
- **Polarity swap:** automatic polarity reversal on continuity test.
- **Insulation range:** wide range of insulation test voltages from 50 V to 1000 V, reading up to 1000 MΩ.
- **Trip Lock function:** RLOOP function performs a loop resistance test without tripping the RCD.
- **RCD auto:** automated RCD testing procedure significantly reduces test time.
- **PC SW EuroLink LITE** included in the standard set enables downloading of test results and parameters and creation of test reports.

APPLICATION:

- Initial and periodic testing of domestic and industrial installations
- Testing of single and multiphase systems.
- Testing of TT and TN systems.

STANDARDS:

Functionality:

IEC/EN 61557

Other reference standards for testing:

IEC/EN/HD 60364; IEC/EN 61008; IEC/EN 61009; IEC/EN/TR 60755; AS/NZ 3018; CEI 64.8; HD 384; BS 7671; VDE 0413

Electromagnetic compatibility:

EN 50081 - 1; EN 50082 - 1

Safety: IEC/EN 61010-1; IEC/EN 61010-031; IEC/EN 61010-2-032

TECHNICAL DATA:

Function	Measuring range	Resolution	Accuracy
Insulation resistance (EN 61557-2)	U = 50, 100 V _{DC} : R: 0.000 MΩ ... 1.999 MΩ 2.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 199.9 MΩ	0.001 MΩ 0.01 MΩ 0.1 MΩ	±(5 % of reading + 3 digits) ±(5 % of reading + 3 digits) ±(5 % of reading + 3 digits)
	U = 250, 500, 1000 V _{DC} : R: 0.000 MΩ ... 1.999 MΩ 2.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 199.9 MΩ 200 MΩ ... 1000 MΩ	0.001 MΩ 0.01 MΩ 0.1 MΩ 1 MΩ	±(2 % of reading + 2 digits) ±(2 % of reading + 2 digits) ±(2 % of reading + 2 digits) ±10 % of reading
Continuity of PE conductor with polarity change, test current 200 mA (EN 61557-4)	0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200 Ω ... 1999 Ω	0.01 Ω 0.1 Ω 1 Ω	±(2 % of reading + 2 digits) ±3 % of reading ±3 % of reading
Low resistance continuity measure- ment, test current 7mA (continuous measurement)	0.0 Ω ... 199.9 Ω 200 Ω ... 2000 Ω	0.1 Ω 1 Ω	±(3 % of reading + 3 digits) ±(3 % of reading + 3 digits)
Loop impedance (EN 61557-3)	0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200 Ω ... 2000 Ω	0.01 Ω 0.1 Ω 1 Ω	±(2 % of reading + 3 digits)
Line impedance (EN 61557-3)	0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200 Ω ... 2000 Ω	0.01 Ω 0.1 Ω 1 Ω	±(2 % of reading + 3 digits)
Voltage	0 V ... 440 V	1 V	±(2 % of reading + 2 digits)
Phase sequence (EN 61557-7)	1.2.3 or 2.1.3.		
RCD testing (EN 61557-6)	I _{AN} : 10 mA, 30 mA, 100 mA, 300 mA, 500 mA, 1 A		
- Contact voltage U _c	0.0 V ... 9.99 V 10.0 V ... 100.0 V	0.01 V 0.1 V	(-0 / +10 %) of reading ± 0.2 V (-0 / +10 %) of reading
- Trip-out time	0 ms ... 500 ms	1 ms	±3 ms
- Trip-out current	0.2 x I _{AN} ... 1.1 x I _{AN} (AC type) 0.2 x I _{AN} ... 1.5 x I _{AN} (A type)	0.05 x I _{AN} 0.05 x I _{AN}	±0.1 x I _{AN} ±0.1 x I _{AN}
Earth resistance (EN 61557-5) (4-wire method; 4-wire method with one clamp)	0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200 Ω ... 1999 Ω 2.00 kΩ ... 19.99 kΩ	0.01 Ω 0.1 Ω 1 Ω 10 Ω	±(2 % of reading + 3 digits) ±(2 % of reading + 3 digits) ±(2 % of reading + 3 digits) ± 5 % of reading
	Earth resistance, two clamps method	0.00 Ω ... 19.99 Ω 20.0 Ω ... 100.0 Ω	0.01 Ω 0.1 Ω
Current TRMS	0.0 mA ... 99.9 mA 100 mA ... 999 mA 1.00 A ... 9.99 A 10.0 A ... 99.9 A 100 A ... 200 A	0.1 mA 1 mA 0.01 A 0.1 A 1 A	±(5 % of reading + 3 digits) ± 5 % of reading ± 5 % of reading ± 5 % of reading ± 5 % of reading
	Varistor Test	0 V ... 1000 V	1 V
Illuminance (Type B)	0.00 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 reading + 2 digits)
Power supply	4 x 1.2 V rechargeable batteries or 4 x 1.5 V alkaline batteries, type C		
Over voltage category	CAT III / 300 V; CAT II / 600 V		
Protection class	Double insulation		
COM port	RS232		
Dimensions	265 x 110 x 185 mm		
Weight	2.1 kg		

STANDARD SET:

MI 2086 ST

- Instrument Eurotest 61557
- Plug commander, 1.5 m
- Test lead, 3 x 1.5 m
- Crocodile clip
- Test probe, 2 pcs (blue, black)
- RS232 cable
- PC Software EuroLink LITE
- Set of carrying belts
- Soft carrying bag

- Instruction manual
- Handbook on CD
- Calibration certificate

MI 2086 EU

- MI 2086 ST
- Current clamp A 1018 (low range, leakage)
- Test lead, 4 m
- PC Software EuroLink PRO



MI 2086 EU