



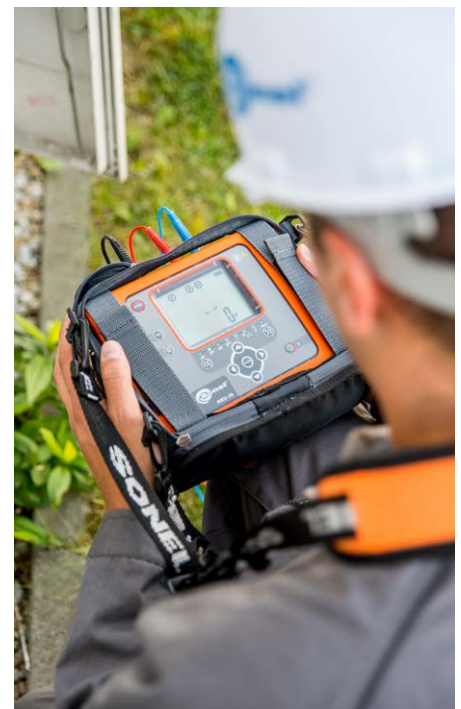
Universal earth tester

Measurement methods

- **3-pole and 4-wire method** – measurement of earthing systems using auxiliary probes
- **3-pole method with clamp** – measurement of earthing systems with multiple earth electrodes
- **Two-clamp method** – measurement of earthing system when the auxiliary probes cannot be used
- **Earth resistivity** – Wenner method
- **Resistance of earth connection and equipotential bonding** measured using current ≥ 200 mA with auto-zero function – meets the requirements of EN 61557-4

Features

- Measurement of auxiliary electrode resistances R_S and R_H
- Measurement of interference voltage
- Measurement in the presence of interference voltages in networks with frequencies of 50 Hz and 60 Hz
- Selection of maximum measurement voltage (25 V and 50 V)
- In ground resistivity measurements, distances between electrodes can be input in meters (m) or feet (ft)





Application

The MRU-30 earth resistance meter is designed to measure single and multiple earthings using auxiliary electrodes and/or clamps. Moreover it is possible to measure ground resistivity (Wenner method) and verify the continuity of equipotential bondings and protective conductors.



Capabilities

The meter provides the ability to make grounding tests with all kinds of the technical method. High immunity to interference allows it to be used even in difficult conditions in circuits with interfering currents. Simple and intuitive operation makes the measurements easier and faster. The meter has internal memory. The measurement results can be transmitted to a computer for data processing and preparation of documentation from the grounding tests.

Durable and practical casing


Ergonomic, small and practical housing allows comfortable and easy operation. The meter is resistant to all weather conditions. IP65 ingress protection guarantees dustproof and resistance to water jets on each side. The battery is permanently built-in and can be charged from a PowerBank or car cigarette lighter.
















Technical specification

Measurement functions	Measurement range	Display range	Resolution	Accuracy ±(% m.v. + digits)
Interference voltage	0 V...100 V	0 V...100 V	1 V	±(5% m.v. + 2 digits)
Resistance of earth connection and equipotential bonding	0.13 Ω...1999 Ω acc. to EN 61557-4	0.00 Ω...1999 Ω	from 0.01 Ω	±(2% m.v. + 3 digits)
Earth resistance				
2-pole method	0.00 Ω...9999 Ω	0.00 Ω...9999 Ω	from 0.01 Ω	from ±(3% m.v. + 3 digits)
3-pole and 4-wire method	0.53 Ω...9999 Ω acc. to EN 61557-5	0.00 Ω...9999 Ω	from 0.01 Ω	from ±(3% m.v. + 3 digits)
3-pole + clamp method	0.00 Ω...9999 Ω	0.00 Ω...9999 Ω	from 0.01 Ω	from ±(3% m.v. + 3 digits)
two-clamp method	0.00 Ω...99.9 Ω	0.00 Ω...99.9 Ω	from 0.01 Ω	from ±(10% m.v. + 8 digits)
auxiliary electrodes resistance	0 Ω...19.9 kΩ	0 Ω...19.9 kΩ	from 1 Ω	±(5% (R _E +R _H +R _S) + 8 digits)
Earth resistivity	0.00 Ωm...999 kΩm	0.00 Ωm...999 kΩm	from 0.1 Ωm	Depends on the accuracy of the R _E 4p measurement, but not less than ±1 digit
Leakage current	0.0 mA...5.00 A	0.0 mA...5.00 A	from 0.1 mA	from ±(5% m.v. + 5 digits)
Safety and work conditions				
Measuring category according to EN 61010				III 300 V
Ingress protection				IP65
Type of insulation according to EN 61010-1 and IEC 61557				double
Dimensions				200 x 150 x 73 mm 7.9" x 5.9" x 2.9"
Weight				ca. 1.14 kg ca. 2.5 lbs
Operating temperature				-10...+50°C 14...122°F
Storage temperature				-20...+60°C -2...+140°F
Humidity				20...90%
Nominal temperature				23 ± 2°C 73.4°F ± 3.6°F
Reference humidity				40%...60%
Memory and communication				
Memory of measurement results				990 results
Data transmission				USB 2.0
Other information				
Quality standard – development, design and production				ISO 9001
The product meets the EMC (emission for industrial environment) requirements according to standards				EN 61326-1 EN 61326-2-2

Standard accessories

	Test lead with banana plugs; 1 kV; 1.2 m; red WAPRZ1X2REBB		Earthing measurement test lead with banana plugs on reel; 25 m; red WAPRZ025REBBSZ		Earthing measurement test lead with banana plugs on reel; 50 m; yellow WAPRZ050YEBBSZ
	Test probe with banana socket; 1 kV; red WASONREOGB1		Black crocodile clip 1 kV 20 A WAKROBL20K01		Test lead with banana plugs; 1 kV; 2.2 m; black WAPRZ2X2BLBB
	2x earth contact pin probe (30 cm) WASONG30		Clamp terminal with banana plug termination WAZACIMA1		M-9 carrying case WAFUTM9
	Meter power adapter (type Z7) WAZASZ7		Power cord (IEC C7 plug) WAPRZLAD230US		L-10 carrying case WAFUTL10
	USB cable WAPRZUSB		Factory calibration certificate		

Optional accessories

	Test lead 75 / 100 / 200 m red, for MRU (banana plugs, on a reel) WAPRZ075REBBSZ WAPRZ100REBBSZ WAPRZ200REBBSZ		Test lead 75 / 100 / 200 m blue, for MRU (banana plugs, on a reel) WAPRZ075BUBBSZ WAPRZ100BUBBSZ WAPRZ200BUBBSZ		Test lead 75 / 100 / 200 m yellow, for MRU (banana plugs, on a reel) WAPRZ075YEBBSZ WAPRZ100YEBBSZ WAPRZ200YEBBSZ
	Test lead 30 m, red (banana plugs, on a reel) WAPRZ030REBBSZ		Test lead 15 / 25 m blue, for MRU (on a reel) WAPRZ015BUBBSZ WAPRZ025BUBBSZ		Test lead 40 m / 60 m / 80 m (on a reel, banana plugs) yellow WAPRZ040YEBBSZ WAPRZ060YEBBSZ WAPRZ080YEBBSZ
	Test wire reel WAP0ZSZP1		Test lead 1.2 m CAT III/1000V CAT IV/600V black/blue/yellow WAPRZ1X2BLBB WAPRZ1X2BUBB WAPRZ1X2YEBB		Pin probe CAT III/1000V CAT IV/600V black/blue/yellow WASONBLOGB1 WASONBUOGB1 WASONYEOGB1
	Crocodile clip, 1 kV 20 A red / blue / yellow WAKRORE20K02 WAKROBU20K02 WAKROYE20K02		C-3 current clamp (Φ=52 mm) WACEGN30R		Battery charging cable for 12 V car sockets WAPRZLAD12SAM
	Double-wire test lead 2 m, for N-1 clamps (banana plugs) WAPRZ002DZBB		Earth contact test probe (rod), 80 cm WASONG80V2		L3 carrying case for 80 cm rods WAFUTL3
	Calibration certificate with accreditation				