



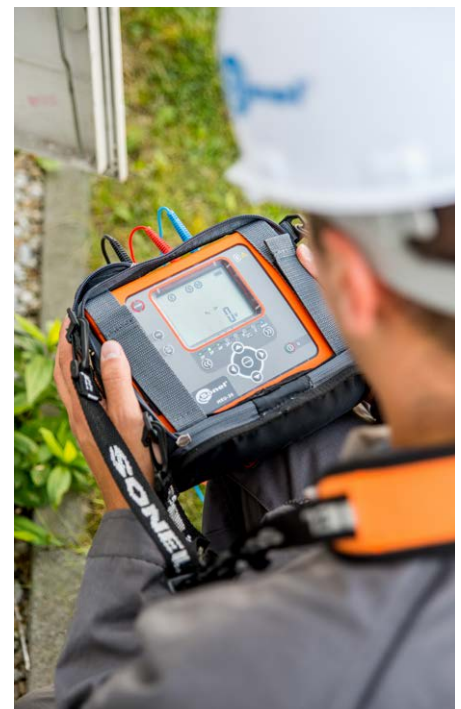
Universal earth tester

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 & Real Time Clock (RTC)
- **Resistance of earth connection and equipotential bonding** measured using current ≥ 200 mA with auto-zero function – meets the requirements of EN 61557-4 & IEC 60364-6-61:2000 section 6.12.2

Features

- Measurement of auxiliary electrode resistances R_s and R_H
- Measurement of interference voltage & Frequency
- 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	±(2% m.v. + 2 digits)
Resistance of earth connection and equipotential bonding IEC 60364-6-61	0.00 Ω...19.9 kΩ acc. to EN 61557-4	0.00 Ω...19.9 kΩ	from 0.01 Ω	±(2% m.v. + 3 digits)
Earth resistance				
2-pole method	0.00 Ω...19.9 Ω	0.00 Ω...19.9 kΩ	from 0.01 Ω	from ±(2% m.v. + 3 digits)
3-pole and 4-wire method	0.53 Ω...19.9 kΩ acc. to EN 61557-5	0.00 Ω...19.9 kΩ	from 0.01 Ω	from ±(2% 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...149.9 Ω	0.00 Ω...149.9 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 _n +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
Battery Backup (NiMH 9.6 V 2 Ah)				>4 Hours
Memory and communication				
Memory of measurement results				990 results
Data transmission				USB 2.0 & Wireless
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



Test probe with banana socket; 1 kV; red

WASONREOGB1



2x earth contact pin probe (30 cm)

WASONG30



Meter power adapter (type Z7)

WAZASZ7



USB cable

WAPRZUSB



Earthing measurement test lead with banana plugs on reel; 25 m; red

WAPRZ025REBBSZ



Black crocodile clip 1 kV 20 A

WAKROBL20K01



Clamp terminal with banana plug termination

WAZACIMA1



230 V power cord (IEC C7 plug)

WAPRZLAD230



Earthing measurement test lead with banana plugs on reel; 50 m; yellow

WAPRZ050YEBBSZ



Test lead with banana plugs; 1 kV; 2.2 m; black

WAPRZ2X2BLBB



M-9 carrying case

WAFUTM9



L-10 carrying case

WAFUTL10



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)

WAPRZ075BUBBSZ
WAPRZ100YEBBSZ
WAPRZ200YEBBSZ



Test lead 30 m, red, for MRU (banana plugs, on a reel)

WAPRZ030REBBSZ



Test lead 15 / 25 m blue, for MRU (on a reel)

WAPRZ015BUBBSZ
WAPRZ025BUBBSZ



Test wire reel

WAP0ZSZP1



Crocodile clip, 1 kV 20 A red/blue/yellow

WAKRORE20K02
WAKROBU20K02
WAKROYE20K02



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



N-1 transmitting clamp (Φ=52 mm)

WACEGN1BB



C-3 current clamp (Φ=52 mm)

WACEGC30KR



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