

CAT III

300 V

IP65



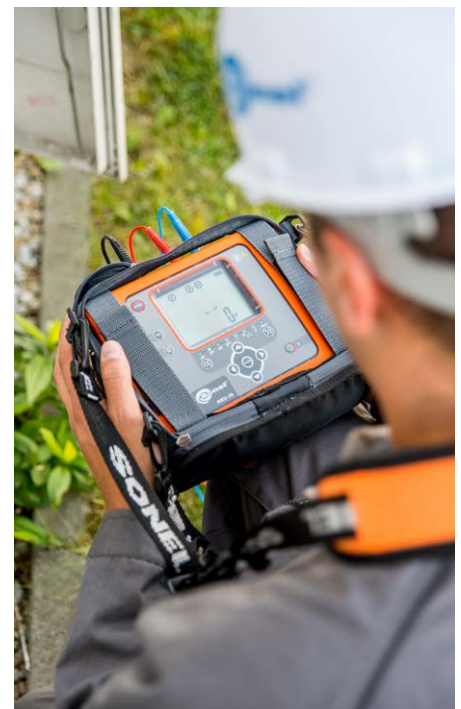
## Universal earth tester

### 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  $\geq 200$  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

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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

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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

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



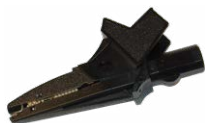
**USB cable**

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



**Factory calibration certificate**



**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

## 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 (banana plugs, on a reel)**

WAPRZ030REBBSZ



**Test wire reel**

WAP0ZSZP1



**Test lead 15 / 25 m blue (on a reel)**

WAPRZ015BUBBSZ  
WAPRZ025BUBBSZ



**Test lead 40 m / 60 m / 80 m (on a reel, banana plugs) yellow**

WAPRZ040YEBBSZ  
WAPRZ060YEBBSZ  
WAPRZ080YEBBSZ



**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**