

MRU-30

index: WMGBMRU30







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_u
- 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)



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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.

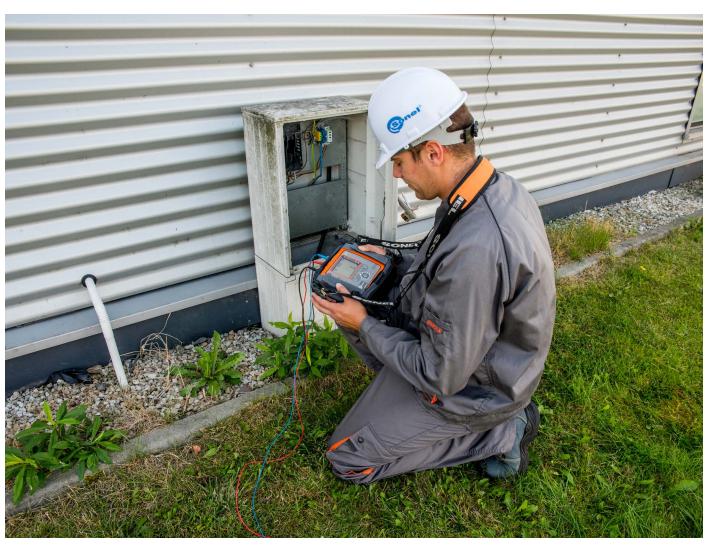


Capabilities

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.



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Technical specification -					
Measurement functions	Measurement range	Display range	Resolution	Accuracy ±(% m.v. + digits)	
Interference voltage	0 V100 V	0 V100 V	1 V	±(5% m.v. + 2 digits)	
Resistance of earth connection and equipotential bonding	0.13 Ω1999 Ω acc. to EN 61557-4	0.00 Ω1999 Ω	from 0.01 Ω	±(2% m.v. + 3 digits)	
Earth resistance					
2-pole method	0.00 Ω9999 Ω	0.00 Ω9999 Ω	from 0.01 Ω	from ±(3% m.v. + 3 digits)	
3-pole and 4-wire method	0.53 Ω9999 Ω acc. to EN 61557-5	0.00 Ω9999 Ω	from 0.01 Ω	from ±(3% m.v. + 3 digits)	
3-pole + clamp method	0.00 Ω9999 Ω	0.00 Ω9999 Ω	from 0.01 Ω	from ±(3% m.v. + 3 digits)	
two-clamp method	0.00 Ω99.9 Ω	0.00 Ω99.9 Ω	from 0.01 Ω	from ±(10% m.v. + 8 digits)	
auxiliary electrodes resistance	0 Ω19.9 kΩ	0 Ω19.9 kΩ	from 1 Ω	$\pm (5\% (R_E + R_H + R_S) + 8 \text{ digits})$	
Earth resistivity	0.00 Ωm999 kΩm	0.00 Ωm999 kΩm	from 0.1 Ωm	Depends on the accuracy of the $\rm R_{\rm E}$ 4p measurement, but not less than ± 1 digit	
Leakage current	0.0 mA5.00 A	0.0 mA5.00 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	s protection		IP65		
Type of insulation according to EN 61010-1 and IEC 61557		double			
Dimensions		200 x 150 x 73 mm			
Weight		ca. 1.14 kg			
Operating temperature		-10+50°C			
Storage temperature		-20+60°C			
Humidity		2090%			
Nominal temperature		23 ± 2°C			
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 9	001	
The product meets the EMC (emission for industrial environment)		EN 61326-1 EN 61326-2-2			
requirements according to standards			EN 6132	ZO-Z-Z	

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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



230 V power cord (IEC C7 plug)

WAPRZLAD230



L-10 carrying case

WAFUTL10



USB cable

WAPRZUSB

Optional accessories



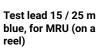
Test lead 75 / 100 / 200 m red, for MRU (banana plugs, on a reel)

WAPRZ075REBBSZ WAPRZ100REBBSZ WAPRZ200REBBSZ



Test lead 75 / 100 / 200 m blue, for MRU (banana plugs, on a reel)

WAPRZ075BUBBSZ WAPRZ100BUBBSZ WAPRZ200BUBBSZ



WAPRZ015BUBBSZ WAPRZ025BUBBSZ



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



Earth contact test



Test wire reel

WAPOZSZP1



Earth contact test probe (rod), 15 cm

WASONG15



probe (rod), 26 cm

WASONG26



Earth contact test probe (rod), 80 cm

WASONG80



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 WAPRZ1X2YEBB



Pin probe CAT III/1000V **CAT IV/600V** black/blue/yellow

WASONBLOGB1 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



L3 carrying case for 80 cm rods

WAFUTL3

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