

CAT III

300 V

IP65



soil resistivity
without manual
conversion

Universal earth tester

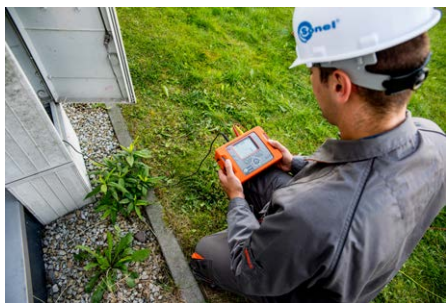
Measurement methods

- **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

- **MRU-30 Pro | Set of accessories for measuring earth resistivity**
- 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 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 most technical methods. 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 harsh 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

		MRU-30 Pro	MRU-30
		WMGBMRU30PRO	WMGBMRU30
	Test lead with banana plugs; 1 kV; 1.2 m; red WAPRZ1X2REBB	1	1
	Test lead with banana plugs; 1 kV; 2.2 m; black WAPRZ2X2BLBB	1	1
	Earthing measurement test lead with banana plugs on reel; 25 m; red WAPRZ025REBBSZ	1	1
	Test lead 25 m blue (on a reel) WAPRZ025REBBSZ	1	
	Earthing measurement test lead with banana plugs on reel; 50 m; yellow WAPRZ050YEBBSZ	1	1
	Test probe with banana socket; 1 kV; red WASONREOGB1	1	1
	Earth contact pin probe (30 cm) WASONG30	4	2
	Black crocodile clip 1 kV 20 A WAKROBL20K01	1	1
	Clamp terminal with banana plug termination WAZACIMA1	1	1
	Meter power adapter (type Z-7) + 230 V power cord (IEC C7 plug) WAZASZ7	1	1
	M-9 carrying case WAFUTM9	1	1
	L-10 carrying case WAFUTL10	1	1
	USB cable WAPRZUSB	1	1
	Factory calibration certificate	1	1

Optional accessories



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

WAPRZ075REBBSZ
WAPRZ100REBBSZ
WAPRZ200REBBSZ



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

WAPRZ030REBBSZ



Test wire reel

WAP0ZSZP1



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

WAKRORE20K02
WAKROBU20K02
WAKROYE20K02



**N-1 transmitting
clamp (Φ=52 mm)**

WACEGN1BB



**Double-wire test
lead 2 m, for N-1
clamps (banana
plugs)**

WAPRZ002DZBB



**Calibration cer-
tificate with
accreditation**



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

WAPRZ075BUBBSZ
WAPRZ100BUBBSZ
WAPRZ200BUBBSZ



**MRU-30 Pro | Test lead
15 m blue (banana
plugs, on a reel)**

WAPRZ015BUBBSZ



**Test lead 25 m
blue (banana plugs,
on a reel)**

WAPRZ025BUBBSZ



**Test lead 1.2 m
CAT III/1000V
CAT IV/600V
black/blue/yellow**

WAPRZ1X2BLBB
WAPRZ1X2BUBB
WAPRZ1X2YEBB



**C-3 current clamp
(Φ=52 mm)**

WACEGC30KR



**Earth contact test
probe (rod), 80 cm**

WASONG80V2



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

WAPRZ075BUBBSZ
WAPRZ100YEBBSZ
WAPRZ200YEBBSZ



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

WAPRZ040YEBBSZ
WAPRZ060YEBBSZ
WAPRZ080YEBBSZ



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

WASONBLOGB1
WASONBUOGB1
WASONYEOGB1



**Battery charging
cable for 12 V car
sockets**

WAPRZLAD12SAM



**L3 carrying case for
80 cm rods**

WAFUTL3

