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# Easy way to measure earthing and soil



>20 mA

short-circuit measuring current

## **Earthing resistance measurements**

- 3-pole and 4-wire method measurement of earthing systems using auxiliary probes
- 2-pole method
- Earth resistivity Wenner method

#### **Features**

- Resistance of auxiliary electrodes R<sub>H</sub> and R<sub>S</sub>
- Measurement of interference voltage to 100 V
- Indication of battery state
- Selection of maximum measuring voltage (25 V and 50 V)
- Auto-OFF function



MRU-11 is a simple meter that allows you to measure grounding by the use of the technical method (3-pole and 4-wire) and soil resistivity by Wenner method. The instrument is easy to handle, resistive to interference, and highly accurate.

MRU-11 is a basic device that allows for checking the quality of the grounding system on the basis of the received measurement result. Its ergonomic shape, durable and firm housing, as well as big and clear display make this instrument ideal to use both in the field and most working environments.

The device is simple to operate and intuitive. It is the best choice for electrical installations contractors, technicians, and professionals dealing with grounding measurements.





Measurement functions	Measurement range	Display range	Resolution	Accuracy ±(% m.v. + digits)	
Interference voltage	0 V100 V	0 V100 V	1 V	±(10% m.v. + 1 digit)	
Earth resistance					
2-pole method	0.009999 Ω	0.009999 Ω	from 0.01 Ω	from ±(3% m.v. + 3 digits)	
3-pole and 4-wire method	0.539999 Ω acc. to EN 61557-5	0.009999 Ω	from 0.01 Ω	from ±(3% m.v. + 3 digits)	
auxiliary electrodes resistance	0 Ω19.9 kΩ	0 Ω19.9 kΩ	from 1 Ω	±(5% m.v. + 8 digits)	
Earth resistivity	0.0 Ωm999 kΩm	0.0 Ωm999 kΩm	from 0.1 Ωm	Depends on the accuracy of the R <sub>E</sub> 4p measurement, but not less than ±1 digit	
Safety and work conditions					
Measuring category according to EN 61010		III 300 V			
Ingress protection		IP67			
Type of insulation according to EN 61010-1 and IEC 61557		double			
nensions		221 x 102 x 62 mm 8.7" x 4.0" x 2.4"			
Weight			ca. 660 g		
			ca. 1.4		
Operating temperature		-10+50°C 14122°F			
Storage temperature		-20+60°C			
Storage temperature		-2+140°F			
Humidity		2090%			
Nominal temperature		23 ± 2°C 73.4°F ± 3.6°F			
Reference humidity		40%60%			
Other information					
Quality standard – development, design and production		ISO 9001			
The product meets the EMC (emission for ind	EN 61326-1				
requirements according to standards	•		EN 613	26-2-2	

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### **Standard accessories**



Crocodile clip, blue, 1 kV, 20 A

WAKROBU20K02



Crocodile clip, black, 1 kV, 20 A

WAKROBL20K01



4 x earth contact test probe (rod), 25 cm

WASONG25



Test lead 15 m, blue (banana plugs, on H-frame reel)

WAPRZ015BUBBN



Test lead 15 m, red (banana plugs, on H-frame reel)

WAPRZ015REBBN



Test lead 30 m, yellow (banana plugs, on H-frame reel)

WAPRZ030YEBBN



Test lead 2.2 m, blue, 1 kV (banana plugs)

WAPRZ2X2BUBB



Test lead 2.2 m, black, 1 kV (banana plugs)

WAPRZ2X2BLBB



4 x alkaline battery 1.5 V AA, LR6



M1 hanging straps

WAPOZSZE4



M1 hanging hook straps

WAPOZUCH1



M6 carrying case

WAFUTM6



Factory calibration certificate

# **Optional accessories**



Earth contact test probe (rod), 30 cm

WASONG30



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

WAPRZ100REBBSZ



Test lead 200 m, yellow, for MRU (banana plugs, on a reel)

WAPRZ200YEBBSZ



Earth contact test probe (rod), 80 cm

WASONG80V2



Test lead 25 m, for MRU (banana plugs, on a reel), red

WAPRZ025REBBSZ



Test lead 40 m / 50 m / 60 m / 80 m for MRU (banana plugs, on a reel), yellow

WAPRZ040YEBBSZ WAPRZ050YEBBSZ WAPRZ060YEBBSZ WAPRZ080YEBBSZ



Cramp (banana plug)

WAZACIMA1



L3 carrying case for 80 cm rods

WAFUTL3



Calibration certificate with accreditation

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