EARTH RESISTANCE METER
MRU-20
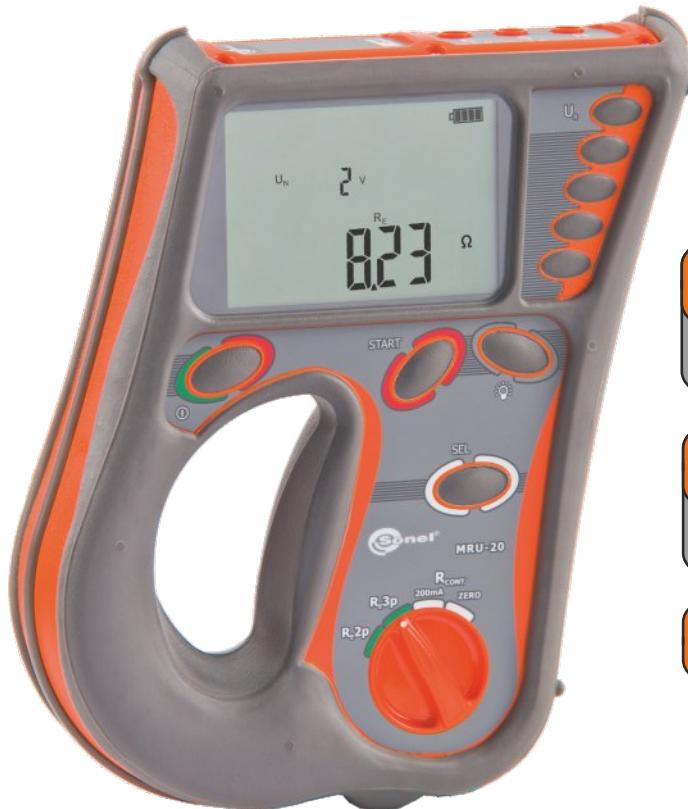
IEC
61557

CAT IV
300V

IP 54

Possible measurements:
- earth resistance measurment with 3-pole method,
- measurement of continuity of equipotential bondings and protective conductors with auto-zero function - with current 200mA,
- resistance measurement using 2-pole method.

Standard accesories of meter MRU-20:

- Test lead on a reel with banana plugs; 30m; red	WAPRZ030REBBSZ	- Earth contact test probe (rod); 0,30m (2 pcs)	WASONG30
- Test lead on a reel with banana plugs; 15m; blue	WAPRZ015BUBBSZ	- Carrying case	WAWALL1
- Test lead with banana plug 2,2m; black	WAPRZ2X2BLBB	- Harness for carrying instrument	WAPOZSZE2
- Test lead with banana plug; 1,2m; red	WAPRZ1X2REBB	- R6 batteries	
- Pin probe with banana connector- red	WASONREOGB1	- Operating manual,	
- „Crocodile" clip K01; black	WAKROBL20K01	- Calibration certificate.	

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Optional accesories od meter MRU-20:

- Test lead on a reel with banana plugs; 25m; blue	WAPRZ025BUBBSZ	- Carrying case L3	WAFUTL3
- Test lead on a reel with banana plugs; 50m; yellow.	WAPRZ050YEBBSZ	- Cramp	WAZACIMA1
- Test wire reel	WAPOZSZP1		
- Earth contact test probe (rod); 0,80m	WASONG80		

- **It allows to take:**
  - earth resistance measurement using auxiliary probes with 3-pole method,
  - resistance measurement using 2-pole method,
  - measurement of continuity of equipotential bondings and protective conductors (meeting the requirements of IEC 61557-4) with auto-zero function – with current 200mA.

- **Additionally:**
  - AUTO-OFF function after 5 minutes,
  - indication of battery state.

Electric security:
- type of insulation — double, according to IEC 61010-1and IEC 61557
- measurement category — CAT IV 300V acc. to IEC 61010-1
- protection class acc. to EN 60529 — IP54

Rated operational conditions:
- operation temperature — -10...+55°C
- storage temperature — -20...+70°C
- humidity — 20...80%

Other technical data:
- power supply: — alkaline batteries or NiMH rechargeable batteries, size AA (8 pcs)
- LCD display — segment, backlit
- weight with batteries — approx. 1,3kg
- dimensions — 260 x 190 x 60mm
- electromagnetic compatibility — according to IEC 61000-6-3 and IEC 61000-6-2

Measurement of earthing resistance
measurement range to IEC61557-5: **0,50Ω…1,99kΩ for U_n=50V;**
0,68Ω…1,99kΩ for U_n=25V;

Range	Resolution	Accuracy
0,00...9,99Ω	0,01Ω	
10,0...99,9Ω	0,1Ω	±(2% m.v. + 3 digits)
100...999Ω	1Ω	
1,00k...1,99kΩ	0,01kΩ	

- measurement current: under short circuit >20mA,
- voltage on open terminals: selectable 25V AC or 50V AC,
- frequency of measurement current: 125Hz

Measurement of resistance of auxiliary electrodes R_H i R_S

Range	Resolution	Accuracy
0...999Ω	1Ω	
1,00k...9,99kΩ	0,01kΩ	±(5% (R_S+R_E+R_H) + 3 digits)
10,0k...50,0kΩ	0,1kΩ	

Measurement of interference voltage U_N (RMS)

Range	Resolution	Accuracy
0...100V	1V	±(2% m.v. + 3 digits)

Measuremet of continuity of equipotential bondings and protective conductors
measurement range to IEC61557-4: **0,13Ω…199Ω**

Range	Resolution	Accuracy
0,00...9,99Ω	0,01Ω	
10,0...99,9Ω	0,1Ω	±(2% m.v. + 3 digits)
100...199Ω	1Ω	

- measuring method: technical 2-pole method,
- max. voltage on open terminals: 13V,
- measurement current: under short circuit >200mA,
- auto-zero function for measurement leads