



MIC-2

INSULATION RESISTANCE METER



Digital insulation meter MIC-2 automatically select insulation measurements range at 250 and 500V test voltages. This insulation meter is suited for insulation resistance measurements of electric installations, motors and other electric devices. MIC-2 can also be used to measure voltage up to 600V AC and resistance up to 1999Ω. Instrument is easy to use, professional tool in small and incredibly ergonomic case.

Standard accessories of the meter MIC-2:

- „crocodile” clip K01; black
- pin probe with banana connector - black
- batteries 1,5V (AAA) (2 pcs.)

- WAKROBL20K01** - calibration certificate issued by SONEL S.A.
- WASONBLOGB1** - operating manual

Optional accessories of the meter MIC-2:

- AGT-16P (triple phase socket adapter)
- AGT-32P (triple phase socket adapter)
- AGT-63P (triple phase socket adapter)

- WAADAAGT16P** - carrying case S2
- WAADAAGT32P** - calibration certificate issued by calibration laboratory
- WAADAAGT63P**

- WAFUTS2**
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MIC-2

- **Insulation resistance measurement:**
 - the measurement voltage is selected between the two values 250V or 500V,
 - on-line insulation resistance measurement,
 - automatic discharge of tested object's capacitance after measurement of insulation resistance,
 - acoustic determination of 5 seconds time intervals that facilitates to take time characteristics during insulation resistance measurement,
 - protection against live objects.
- **Low voltage resistance measurement in range 0...2000Ω:**
 - current measurement <10mA with resolution 0.1Ω,
 - quick acoustic signalling (beeper) for circuit resistance below 10Ω.
- **AC/DC voltage measurement in range 0...600V:**
 - automatic detection AC/DC voltage.
- **Autoranging.**
- **Suitable for 50Hz and 60Hz network.**
- **Backlit display.**
- **„AUTO-OFF” function.**
- **Meter meets the requirements of the standard EN 61557.**

Electric security:	
- type of insulation	double, according to EN 61010-1 and IEC 61557
- measurement category	CAT IV 600V acc. to EN 61010-1
- protection class acc. to EN 60529	IP65
Other technical data:	
- power supply	batteries LR03 (AAA) (2 pcs.) or rechargeable battery
- measurement current R_{iso}	1,2mA ± 0,2mA
- max interference voltage at which a measurement is realised R_{iso}	20V
- number of R_{iso} measurements	> 500
- dimensions	approx. 240 x 60 x 30 mm
- weight (including batteries)	approx. 0,3kg
- auto power OFF	5 min.
- electromagnetic compatibility	according to EN 61000-6-3 and EN 61000-6-2
- quality standard	ISO 9001

The group of Insulation Resistance Meters conforms the following directives or standards according to CE requirements.

- Directive: Low Voltage Directive (LVD) 2005/95/WE.
- Standards: EN 61010-1:2001 Safety requirements for electrical equipment for measurement, control and laboratory use. General requirements.
 EN 61010-031:2002/A1:2008: Safety requirements for electrical equipment for measurement, control and laboratory use. Safety requirements for hand-held probe assemblies for electrical measurement and test.
 EN 61557-2:2007 Electrical safety in low-voltage distribution systems up to 1000 V AC and 1500 V DC - Equipment for testing, measuring, or monitoring of protective measures Part 2: Insulation resistance. This part of IEC 61557 specifies the requirements applicable to equipment for measuring the insulation resistance of equipment and installations in the de-energized state.
- Directive: Electromagnetic compatibility (EMC): 2004/108/WE.
- Standards: EN 61325-1:2006 Electrical equipment for measurement, control and laboratory use - EMC requirements.

Insulation resistance measurement:

$U_{iso}=250V$
 Measurement range: IEC 61557-2: 250kΩ...1000MΩ

Range	Resolution	Accuracy
1...249kΩ	1kΩ	not specified
250...1999kΩ	1kΩ	±(3% m.v. + 8 digits)
2,00...19.99MΩ	0.01MΩ	
20,0...199.9MΩ	0.1MΩ	
200...1000MΩ	1MΩ	

$U_{iso}=500V$
 Measurement range: IEC 61557-2: 500kΩ...1999MΩ

Range	Resolution	Accuracy
1...499kΩ	1kΩ	not specified
500...1999kΩ	1kΩ	±(3% m.v. + 8 digits)
2,00...19.99MΩ	0.01MΩ	
20,0...199.9MΩ	0.1MΩ	
200...1999MΩ	1MΩ	

Resistance measurement:

Range	Resolution	Accuracy
0,0...199.9Ω	0.1Ω	±(4% m.v. + 3 digits)
200...1999Ω	1Ω	

- continuous audible signal for $R < 10Ω$
- measurement current (with open terminals for $U_{out} > 3.0V$): < 10mA
- max voltage on open terminals: 4...24V
- max interference voltage for which measurement is still possible: +7V/-1V DC, 5V AC

AC/DC voltage measurement

Range	Resolution	Accuracy
0...600V	1V	±(3% m.v. + 2 digits)

„m.v.” - measured value.

Rated operational conditions:	
- operating temperature	0...+40°C
- reference temperature	23 ± 2°C
- storage temperature	-20...+70°C