

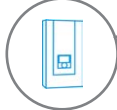
For measurement of wiring in flats, houses and public buildings



For measurement of low voltage motors



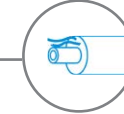
For measurement of home appliances



For measurement of telephone and IT wiring



For measurement of pre-insulated pipes



For measurements in anti-icing systems


**CAT III**
**1000 V**
**CAT IV**
**600 V**

**IP67**

## Measure insulation resistance up to 10 GΩ with the MIC-10 Insulation Resistance Meter

### Main features

- measurement of insulation resistance up to 10 GΩ thanks to max 1000 V measurement voltage
- designed for harsh environmental conditions - IP67 ingress protection
- allows for testing electrical continuity - R<sub>CONT</sub> 200 mA function
- checking start capacitors in motors thanks to capacity measurement function

### ...and much more

- measurement voltage selected from: 50, 100, 250, 500, 1000 V
- continuous reading of measured insulation resistance
- automatic discharge of the measured object's capacitance upon completion of insulation resistance measurement
- sound signalling of five-second time intervals, facilitating capture of time characteristics
- readings of actual measurement voltage during measurement
- protection against measurement of live objects
- three-lead measurement
- capacitance measurement during measurement of R<sub>ISO</sub>
- low-voltage measurement of circuit continuity and resistance
- continuity test of protective conductors and equipotential bonding with current ≥200 mA flowing in two directions in compliance with EN 61557-4
- measurement of direct and alternating voltages within the range of 0...600 V



## Application

MIC-10 is an insulation resistance meter, which may be very useful for various electrical works (even the simplest), in locations with Low Voltage power supply, including: electrical systems in single- and multi-family buildings as well as in public buildings and in small workshops or factories. With its test voltage settings of 50 V, 100 V or 250 V the device is perfect for quick checking of the insulation condition in telecommunications systems and control cables.



## Features

Test voltage settings of 500 V or 1000 V perfectly match the requirements for assessing the protection of power supply lines but also of floors and walls - PRS-1 probe (optional accessory) is very useful for this purpose.

With MIC-10 meter you can check whether an object is under voltage (measuring range up to 600 V), both in overhead and cable networks (measuring category of the device: CAT IV 600 V). You can verify the continuity of cables, e.g. PE connections and equipotential bonding - using the current of at least 200 mA, according to EN 61557-4. You can check the capacity of the start-up capacitors in household appliances and drives of any type (measuring range up to 10  $\mu$ F).

This makes MIC-10 meter an essential tool for every service technician.



## Durable housing

Handy and ergonomic housing provides protection of IP67, ensuring reliability of the meter even in the harshest environmental conditions (moisture, dust, high temperature, etc.).

### Insulation resistance measurement

Range	Resolution	Accuracy	$U_n$	Measuring range
0.0...999.9 k $\Omega$	0.1 k $\Omega$	$\pm$ (3% m.v. + 8 digits)	50 V	50 k $\Omega$ ...250.0 M $\Omega$
1.000...9.999 M $\Omega$	0.001 M $\Omega$		100 V	100 k $\Omega$ ...500.0 M $\Omega$
10.00...99.99 M $\Omega$	0.01 M $\Omega$		250 V	250 k $\Omega$ ...2.000 G $\Omega$
100.0...250.0 M $\Omega$ (for $U_n = 50$ V) 100.0...500.0 M $\Omega$ (for $U_n = 100$ V) 100.0...999.9 M $\Omega$ (for $U_n \geq 250$ V)	0.1 M $\Omega$		500 V	500 k $\Omega$ ...5.000 G $\Omega$
1.000...2.000 G $\Omega$ (for $U_n = 250$ V)	0.001 G $\Omega$	$\pm$ (4% m.v. + 6 digits)	1000 V	1000 k $\Omega$ ...10.00 G $\Omega$
1.000...5.000 G $\Omega$ (for $U_n = 500$ V)	0.001 G $\Omega$			
1.000...9.999 G $\Omega$ (for $U_n = 1000$ V)	0.001 G $\Omega$			
10.00 G $\Omega$ (for $U_n = 1000$ V)	0.01 G $\Omega$			

## Low-voltage measurement of continuity of circuit and resistance

Measuring range according to EN 61557-4: 0.10...1999  $\Omega$

Range	Resolution	Accuracy
0.00...19.99 $\Omega$	0.01 $\Omega$	$\pm(2\% \text{ m.v.} + 3 \text{ digits})$
20.0...199.9 $\Omega$	0.1 $\Omega$	
200...1999 $\Omega$	1 $\Omega$	$\pm(4\% \text{ m.v.} + 3 \text{ digits})$

## Capacitance measurement

Range	Resolution	Accuracy
1...999 nF	1 nF	$\pm(5\% \text{ m.v.} + 10 \text{ digits})$
1.00...9.99 $\mu\text{F}$	0.01 $\mu\text{F}$	

- Capacitance measurement result displayed after measurement of  $R_{\text{ISO}}$
- For measurement voltages below 100 V and measured resistance of less than 10 M $\Omega$ , the error of capacitance measurement is unspecified

## DC and AC voltage measurement

Range	Resolution	Accuracy
0...299.9 V	0.1 V	$\pm(2\% \text{ m.v.} + 6 \text{ digits})$
300...600 V	1 V	$\pm(2\% \text{ m.v.} + 2 \text{ digits})$

- frequency range: 45...65 Hz

## Low-current resistance measurement

Range	Resolution	Accuracy
0.00...199.9 $\Omega$	0.1 $\Omega$	$\pm(3\% \text{ m.v.} + 3 \text{ digits})$
200...1999 $\Omega$	1 $\Omega$	

## Technical specification

type of insulation	double, according to EN 61010-1 and EN 61557
measurement category	IV 600 V (III 1000 V) according to EN 61010-1
degree of housing protection acc. to EN 60529	IP67
power supply of the meter	4 x AA alkaline batteries or rechargeable batteries
dimensions	200 x 100 x 60 mm
meter weight	approx. 0.6 kg
operating temperature	-10°C...+50°C
display	LCD segment
quality standard for design, construction and manufacturing compliant with the device meets the requirements of	ISO 9001
the product meets EMC requirements (immunity for industrial environment) according to the following standards	EN 61557 standard EN 61326-1 EN 61326-2-2

## Standard accessories



test probe with banana socket; 1 kV; black

WASONBLOGB1



test probe with banana socket; 1 kV; red

WASONREOGB1



black "crocodile" clip 1 kV 20 A

WAKROBL20K01



test lead with banana plugs; 1 kV; 1.2 m; black

WAPRZ1X2BLBB



test lead with banana plugs; 1 kV; 1.2 m; red

WAPRZ1X2REBB



M-6 carrying case

WAFUTM6



meter strap (type M-1)

WAPOZSZE4



M-1 housing holder - hanger

WAPOZUCH1

## Additional accessories



**pin probe, blue  
1 kV (banana  
socket)**

WASONBU0GB1



**red "crocodile"  
clip 1 kV 20 A**

WAKRORE20K02



**blue "crocodile"  
clip 1 kV 20 A**

WAKROBU20K02



**test lead 5 m,  
black, 1 kV (banana  
plugs, shielded)**

WAPRZ005BLBBE



**test lead 5 m, red,  
1 kV (banana plugs)**

WAPRZ005REBB



**test lead 5 m, blue,  
1 kV (banana plugs)**

WAPRZ005BUBB



**shielded test  
lead with banana  
plugs; 1 kV;  
1.2 m; black**

WAPRZ1X2BLBBE



**CS-1 cable simulator**

WAADACS1



**test lead with  
banana plugs;  
1 kV; 1.2 m; blue**

WAPRZ1X2BUBB



**AGT-16P three-  
phase socket  
adapter 16 A**

WAADAAGT16P



**AGT-32P three-  
phase socket  
adapter 32 A**

WAADAAGT32P



**AGT-63P three-  
phase socket  
adapter 63 A**

WAADAAGT63P



**AGT-16C three-  
phase socket  
adapter 16 A (PEN)**

WAADAAGT16C



**AGT-32C three-  
phase socket  
adapter 32 A (PEN)**

WAADAAGT32C



**PRS-1 resistance  
test probe**

WASONPRS1GB



**AGT-16T industrial  
socket adapter 16 A**

WAADAAGT16T



**AGT-32T industrial  
socket adapter 32 A**

WAADAAGT32T