

AMIC-30

HIGHEST ACCURACY & LOWEST COST



Insulation Resistance Meter

AMIC-30

Insulation resistance measurement: 50-1000 V (10V steps) - **100GΩ**.

Low voltage resistance measurement.

AC/DC voltage measurement 0...600V.

Capacitance measurements, Leakage current and absorption coefficients.

990 memory cells and wireless data transmission to a computer.

amperis

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Main characteristics are the following:

Insulation resistance measurement:

- Measurement voltage: 50 - 1000 V, 10V steps.
- Continuous indication of insulation resistance or leakage current.
- Automatic measurement in sockets with the UNI-Schuko adapter with possibility of configuring pairs of measured cables.
- Automatic discharge of capacitance of tested object after the insulation resistance measurement.
- Acoustic signaling of five-second periods to facilitate obtaining time characteristics.
- Measured test times T_1 , T_2 and T_3 to measure one or two absorption coefficients in the 1... 600 sec. range.
- Indication of actual test voltage during the measurement.
- Protection against measuring live objects.
- Three-lead measurement.

Leakage current measurement.

Continuity measurement of protective and equipotential conductors according to EN 61557-4 with the >200mA current.

Low-voltage circuit continuity and resistance measurement:

- Circuit resistance measurement ($< 1999\Omega$) with $< 15\text{mA}$ current.
- Quick sound signal if circuit resistance is below 30.

Capacitance measurement during the RISO measurement.

Measurement of alternating and direct voltages in the 0...600V range.

990 memory cells and wireless data transmission to a computer using the USB - OR-1 adapted.

Power supply: 4 AA or rechargeable batteries, monitoring of power supply voltage.

Continuity measurement of protective and equipotential conductors with the 200mA current

Measuring range according to EN 61557-4: 0,10...1999 Ω

Range	Resolution	Accuracy
0,00...19,99 Ω	0,01 Ω	$\pm(2\% \text{ m.v.} + 3 \text{ digits})$
20,0...199,9 Ω	0,1 Ω	
200...1999 Ω	1 Ω	$\pm(4\% \text{ m.v.} + 3 \text{ digits})$

Voltage on open terminals: $< 8\text{V}$.
Output current at $R < 2\Omega$: $I_{sc} > 200\text{mA}$.
Compensation of test leads' resistance.
Bidirectional current flow, average resistance value is displayed.

Low-voltage and resistance measurement

Range	Resolution	Accuracy
00,0...199,9 Ω	0,1 Ω	$\pm(3\% \text{ m.v.} + 3 \text{ digits})$
200...1999 Ω	1 Ω	

Voltage on open terminals: $< 8\text{V}$.
Current for closed terminals $5\text{mA} < I_{sc} < 15\text{mA}$.
Sound signal and green LED on when measured resistance $< 30\Omega \pm 50\%$.
Compensation of test leads' resistance.

Capacitance measurements

Range	Resolution	Accuracy
1...999nF	1nF	$\pm(5\% \text{ m.v.} + 5 \text{ digits})$
1,00...9,9 μF	0,01 μF	

Capacitance value displayed during the R_{iso} measurement.
For test voltages below 100V and measured resistance below 10M Ω , unspecified capacitance measurement error.

"m.v." = "measured value".

Insulation resistance measurement:

Measuring range according to EN 61557-2 for $U_N = 50\text{V}$: 50k Ω ...250,0M Ω

Range	Resolution	Accuracy
0,0...999,9k Ω	0,1k Ω	$\pm(3\% \text{ m.v.} + 8 \text{ digits})$ $[\pm(5\% \text{ m.v.} + 8 \text{ digits})]^*$
1,000...9,999M Ω	0,001M Ω	
10,0...99,99M Ω	0,01M Ω	
100,0...250,0M Ω	0,1M Ω	

*: for the WS-04 lead

Measuring range according to EN 61557-2 for $U_N = 100\text{V}$: 100k Ω ...500,0M Ω

Range	Resolution	Accuracy
0,0...999,9k Ω	0,1k Ω	$\pm(3\% \text{ m.v.} + 8 \text{ digits})$ $[\pm(5\% \text{ m.v.} + 8 \text{ digits})]^*$
1,000...9,999M Ω	0,001M Ω	
10,0...99,99M Ω	0,01M Ω	
100,0...500,0M Ω	0,1M Ω	

*: for the WS-04 lead

Measuring range according to EN 61557-2 for $U_N = 250\text{V}$: 250k Ω ...2000,0M Ω

Range	Resolution	Accuracy
0,0...999,9k Ω	0,1k Ω	$\pm(3\% \text{ m.v.} + 8 \text{ digits})$ $[\pm(5\% \text{ m.v.} + 8 \text{ digits})]^*$
1,000...9,999M Ω	0,001M Ω	
10,0...99,99M Ω	0,01M Ω	
100,0...999,9M Ω	0,1M Ω	
1000,0...2000,0M Ω	1M Ω	

*: for the WS-04 lead

Measuring range according to EN 61557-2 for $U_N = 500\text{V}$: 500k Ω ...20G Ω

Range	Resolution	Accuracy
0,0...999,9k Ω	0,1k Ω	$\pm(3\% \text{ m.v.} + 8 \text{ digits})$ $[\pm(5\% \text{ m.v.} + 8 \text{ digits})]^*$
1,000...9,999M Ω	0,001M Ω	
10,0...99,99M Ω	0,01M Ω	
100,0...999,9M Ω	0,1M Ω	
1000,0...9999,0M Ω	1M Ω	
10,0...20,0G Ω^{**}	10M Ω	$\pm(4\% \text{ m.v.} + 6 \text{ digits})$ $[\pm(6\% \text{ m.v.} + 6 \text{ digits})]^*$

*: for the WS-04 lead. **: for the WS-04 lead - range to 10G Ω

Measuring range according to EN 61557-2 for $U_N = 1000\text{V}$: 1000k Ω ...100,0G Ω

Range	Resolution	Accuracy
0,0...999,9k Ω	0,1k Ω	$\pm(3\% \text{ m.v.} + 8 \text{ digits})$
1,000...9,999M Ω	0,001M Ω	
10,0...99,99M Ω	0,01M Ω	
100,0...999,9M Ω	0,1M Ω	
1000,0...9999,9M Ω	1M Ω	
10,0...99,99G Ω	0,01G Ω	$\pm(4\% \text{ m.v.} + 6 \text{ digits})$
100G Ω	0,1G Ω	

Measurement of AC/DC voltage

Range	Resolution	Accuracy
0,0...299,9V	0,1V	$\pm(2\% \text{ m.v.} + 6 \text{ digits})$
300...600V	1V	$\pm(2\% \text{ m.v.} + 2 \text{ digits})$

Frequency range: 45...65Hz



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Specifications AMIC-30

Electric security:

Type of insulation	Doble, según EN 61010-1 e IEC 61557
Measurement category	CAT IV 600Vde acuerdo a EN 61010-1
Protection class acc. to EN 60529	IP67

Other technical data:

Power suply	4 baterías alcalinas o juego de baterías Ni-MH
Weight	1kg
Dimensions	220 x 100 x 60 mm

Standard accesories:



Receiver – interface
for radio transmission
OR1 (USB).

- “Crocodile” clip K02; blue
- Test lead with banana plug; 1,2m; red
- Test lead with banana plug; 1,2m; blue
- Shielded test lead with banana plug;
1,2m; black
- Receiver – interface for radio transmission
OR1 (USB)
- Pin probe with banana connector; black
- Pin probe with banana connector; red
- Carrying case M6
- Hanging straps
- Handle to suspend the meter
- Certificate calibration
- Battery set

Optional accesories:

- Test lead with banana plug 5m; red
- Test lead with banana plug 5m; blue
- Shielded test lead with banana plug; 5m; black
- Test lead with banana plug 1,2m; blue
- “Crocodile” clip K02; red
- “Crocodile” clip K01; black
- “Crocodile” clip K02; blue
- Pin probe with banana connector; blue
- Adapter WS-04 with UNI-Schuko
- Software for creation of documentation from
electrical measurements



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