

Digital Multimeter PCE-ODM 10



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Multimeter with OLED display / Measurement up to 1000V AC & DC / Incl. Rogowski coil up to 3000 A /MIN, MAX, relative and peak measurement / IP 67 Multimeter

This digital multimeter has both automatic and manual range selection and a dual OLED display. The measured values are displayed on the OLED number display up to 6000 digits and in the bar graph. The readings can be read easily and changes can be displayed quickly. The digital multimeter has full input protection and complies with protection class CATIII 1000V.

Simple and direct selection of the basic functions by means of pushbuttons and autom. Range selection for: DCV, ACV, DCA, ACA, ohms, diode, continuity, capacitance, frequency and temperature measurement functions. The digital multimeter measures voltages up to 1000V AC / DC. The current can be measured directly up to 10 A AC / DC and over the Rogowski coil up to 3000 A AC. The case of the digital multimeter is IP67 protected and thus perfectly usable in a robust everyday industrial environment.

- ▶ OLED display
- ▶ Minimum value and maximum value, peak level
- ▶ Hold function
- ▶ Relative value measurement
- ▶ Diode test
- ▶ Continuity tester
- ▶ Incl. current loop
- ▶ Automatic range selection
- ▶ Automatic shutdown
- ▶ Incl. Rogowski coil for 3000 A AC

Specifications

Measuring function

DC voltage DC	Measuring range	Resolution	Accuracy
	60 mV	0.01 mV	± (0.5% from + 5 Dgt)
	600 mV	0.1 mV	± (0.5% from + 5 Dgt)
	6V	0.001 V	± (0.5% from + 5 Dgt)
	60V	0.01V	± (0.5% from + 5 Dgt)
	600V	0.1V	± (0.8% from + 5 Dgt)
	1000V	1 V	± (0.8% from + 5 Dgt)
AC voltage AC (TRMS)	Measuring range	Resolution	Accuracy
	60 mV	0.01 mV	@ 50 ... 60 Hz:
	600 mV	0.1 mV	± (1% from + 5 Dgt)
	6V	0.001V	
	60V	0.01V	@ 61Hz ... 1KHz:
	600V	0.1V	± (3% from + 5 Dgt)
	1000V	1V	
AC + DC TRMS Tension	Measuring range	Resolution	Accuracy
	6V	0.001V	@ 50Hz ... 1KHz:
	60V	0.01V	± (3% from + 40 Dgt)
	600V	0.1V	
	1000V	1V	
DC DC	Measuring range	Resolution	Accuracy
	600 µA	0.1 µA	± (1% from + 5 Dgt)
	6000 µA	1 µA	± (1% from + 5 Dgt)
	60-mA	0.01-mA	± (1% from + 5 Dgt)
	600-mA	0.1-mA	± (1% from + 8 Dgt)
	6 A	0.001 A	± (1.5% from + 8 Dgt)
	10 A	0.01A	± (1.5% from + 8 Dgt)
AC AC (TRMS)	Measuring range	Resolution	Accuracy
	600 µA	0.1 µA	± (1.2% from + 5 Dgt)
	6000 µA	1 µA	± (1.2% from + 5 Dgt)
	60-mA	0.01-mA	± (1.2% from + 5 Dgt)

Subject to change



	600-mA	0.1-mA	± (1.2% from + 5 Dgt)
	6 A	0.001 A	± (1.5% from + 8 Dgt)
	10 A	0.01A	± (1.5% from + 8 Dgt)
4 ... 20-mA %	-25 ... 125%	0.01%	± 50 digits
AC AC	measuring range	resolution	accuracy
Over Rogowski coil	30 A	0.01A	± (1.2% vMw + 10 Dgt)
	300 A	0.1 A	
	3000 A	10 A	
Resistance	Measuring range	Resolution	Accuracy
	600 Ω	0.1 Ω	± (1.2% vMw + 10 Dgt)
	6 kΩ	0.001 kΩ	± (1.2% vMw + 5 Dgt)
	60 kΩ	0.01 kΩ	± (1.2% vMw + 5 Dgt)
	600 kΩ	0.1 Ω	± (1.2% vMw + 5 Dgt)
	6 MΩ	0.001 MΩ	± (1.2% vMw + 5 Dgt)
	60 MΩ	0.01 MΩ	± (2.5% vMw + 10 Dgt)
Frequency	Measuring range	Resolution	Accuracy
	40 Hz ... 100 kHz	0.01 Hz ... 0.001 kHz	± 0.5% of Mw.
Duty cycle	Measuring range	Resolution	Accuracy
	20 ... 80%	0.1%	± (1.2% from + 2 Dgt)
Capacity	Measuring range	Resolution	Accuracy
	999.9 nF	0.1 nF	± (1.2% from + 8 Dgt)
	9.999 nF	0.001 μF	± (1.5% from + 8 Dgt)
	999.9 nF	0.1 μF	± (1.5% from + 8 Dgt)
	99.99 n.f.	0.01 mF	± (2.5% vMw + 20 Dgt)
Temperature with Thermocouple type K	Measuring range	Resolution	Accuracy
	-40 ... 600°C / -40 ... 1112°F	0.1°C / 0.18°F	± (1.5% from + 3°C / 5.4°F)
	600 ... 1000°C / 1112 ... 1832°F	1°C / 1.8°F	± (1.5% from + 3°C / 5.4°F)

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General technical data

Isolation	Class 2 Double insulation
Casing	IP67 plastic housing
Diode test	1.5-mA test current 3V DC open circuit voltage
Continuity test	Alarm tone if resistance < 50 Ω
Display	6,000 digit OLED
Refresh rate display	3 Hz
Automatic shutdown	After 30 minutes
Input impedance	30 M Ω AC / DC V
AC response	TRMS
AC bandwidth	50 ... 1000 Hz
Power supply	Digital multimeter: 9V block battery Rogowski coil: 2 x 1.5V AAA battery
Fuses	800-mA / 1000V fast acting (6.3 x 32 mm) 10 A / 1000V fast acting (10 x 38 mm)
Operating conditions	0 ... 40°C / 32 ... 104°F, < 70% rh
Storage conditions	-10 ... 60°C / 14 ... 140°F, < 80% rh
Operating altitude	< 2000 m / 6561.7 ft above sea level.
Dimensions	170 x 79 x 50 mm / 6.7 x 3.1 x 2 in
Weight	342 g / < 1 lb
Security	UL61010-1 v3 CAT IV 600V CAT III 1000V
Pollution degree	2

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