



# Digital Multimeter PCE-ODM 12



## PCE-ODM 12

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 AAC / DC and over the Rogowski coil up to 3000 AAC. 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 AAC

### General Features PCE-ODM 12

#### 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 MΩ AC / DC V
AC response	TRMS
AC bandwidth	50 ... 1000 Hz

Power supply	Digital multimeter: 9 V 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



<b>Measuring function</b>			
<b>DC voltage DC</b>	<b>Measuring range</b>	<b>Resolution</b>	<b>Accuracy</b>
	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)
<b>AC voltage AC (TRMS)</b>	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	
<b>AC + DC TRMS Tension</b>	6V	0.001V	@ 50Hz ... 1KHz:
	60V	0.01V	± (3% from + 40 Dgt)
	600V	0.1V	
	1000V	1V	
<b>DC DC</b>	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)
<b>AC AC (TRMS)</b>	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)
	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)
<b>4 ... 20-mA %</b>	-25 ... 125%	0.01%	± 50 digits
<b>AC AC Over Rogowski coil</b>	30 A	0.01A	± (1.2% vMw + 10 Dgt)
	300 A	0.1 A	
	3000 A	10 A	
<b>Resistance</b>	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)
<b>Frequency</b>	40 Hz ... 100 kHz	0.01 Hz ... 0.001 kHz	± 0.5% of Mw.
<b>Duty cycle</b>	20 ... 80%	0.1%	± (1.2% from + 2 Dgt)
<b>Capacity</b>	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)
<b>Temperature with</b>	-40 ... 600°C / -40 ... 1112°F	0.1°C / 0.18°F	± (1.5% from + 3°C / 5.4°F)
<b>Thermocouple type K</b>	600 ... 1000°C / 1112 ... 1832°F	1°C / 1.8°F	± (1.5% from + 3°C / 5.4°F)

Subject to change