

Digital Multimeter PCE-DC 10



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Digital multimeter with "SMART" function / Current probe opening of 26 mm / Automatic shutdown after 15 minutes / Flashlight backlight / Extensive measuring functions / For fast and mobile use

The digital multimeter is an ideal measuring device for the fast measurement of currents and voltages. To perform current measurements, a digital multimeter must be connected in series to the load. With this digital multimeter, current measurements directly on the supply line can be performed inductively without disconnecting them to switch on a digital multimeter. Thanks to this inductive current measurement, the risk of electric shock is drastically reduced because the operator has no direct contact with the supply line thanks to the digital multimeter.

In addition to current measurement of up to 600 A AC, the digital multimeter can also measure voltages up to 600V AC / DC, resistors, capacitances and the voltage network frequencies. Another special feature of the digital multimeter is the "SMART" function. With this function the digital multimeter sets the measuring function itself. Thus, the digital multimeter is also used in schools, training centers or other educational institutions.

- ▶ Current measurement up to 600 AAC
- ▶ Maximum forceps opening 26 mm
- ▶ Voltage measurement up to 600V AC / DC
- ▶ Three measurements per second
- ▶ "SMART" function facilitates operation
- ▶ Backlit LCD display

Specifications

AC power

measuring range	Resolution	Accuracy
2 A	0.01A	± (2.5% + 8 digits)
20 A	0.01A	± (2.5% + 8 digits)
200 A	0.1 A	± (2.5% + 8 digits)
600 A	1 A	± (3.0% + 10 digits)

Frequency range: .45 ... 65 Hz

The frequency is only displayed from a current of 0.2A.

maximum input current: up to 600 A for no more than 60 seconds.

Accuracy refers to RMS sine waves.

AC voltage

measuring range	Resolution	Accuracy
6V	0.01V	± (0.8% + 5 digits)
60V	0.1V	
600V	1 V	

Input impedance: 10 MΩ

Overvoltage protection 600V AC / DC rms

Smallest measurable voltage: 1V AC / DC

Frequency range: 45 ... 65 Hz

Accuracy refers to RMS sine waves

If a current is detected during the voltage measurement, "Err" appears on the display

DC voltage

measuring range	Resolution	Accuracy
6V	0.01V	± (0.5% + 3 digits)
60V	0.1V	
600V	1 V	

Input impedance: 10 MΩ

Overvoltage protection 600V AC / DC rms

Smallest measurable voltage: 1V AC / DC

Resistance

measuring range	Resolution	Accuracy
2 kΩ	0.001 kΩ	± (0.8% + 3 digits)
20 kΩ	0.01 kΩ	± (0.8% + 3 digits)
10 MΩ	0.01 MΩ	± (1% + 5 digits)

More information

Manual



More product info



Similar products



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Measuring voltage in open circuit: approx. 0.4V

Overvoltage protection: 250V AC / DC rms

Continuity test

Beep at $< 40 \Omega$

Measuring voltage in open circuit: approx. 0.4V

Overvoltage protection: 250V AC / DC rms

Frequency

measuring range	Resolution	Accuracy
60 Hz	0.1 Hz	$\pm (1\% + 5 \text{ digits})$
600 Hz	1 Hz	
3 kHz	10 Hz	

Total measuring range: 40 ... 3 kHz

Minimum voltage: > 1 AC RMS (The measurement frequency will increase with the voltage)

Overvoltage protection: 600V AC / DC rms

Duty cycle

measuring range	Resolution	Accuracy
10 ... 90%	1%	$\pm 2\%$

Maximum current clamp	26 mm
Opening	
Insulation	CAT III 600V
Measuring rate	About 3 measurements per second
Display	3 5/6 digit LCD
Display area	5999, 1999 for resistance measurement
Measurement outside the measuring range	"OL" display
Automatic shutdown	After 15 minutes, can be deactivated
Coefficients	$0.1 \times \text{accuracy} \times ^\circ\text{C} / ^\circ\text{F}^*$
Power supply	3 x 1.5V AAA batteries
Operating conditions	0 ... 40°C / 32 ... 104°F, $< 80\%$ rh
Storage conditions	-10 ... 60°C / 14 ... 140°F, $< 70\%$ rh (without batteries)
Maximum working height	2000 m / 6561 ft
Dimensions	204 x 78 x 43 mm / 8 x 3.1 x 1.7 in
Weight	About 195 g / < 1 lb

Accuracies are given at ambient conditions of 18 ... 28°C, 65 ... 83°F. *The temperature is the difference between the temperature of the operating conditions and the current ambient temperature.

Example:

Is the current ambient temperature greater than the temperature of the operating conditions

$(50^\circ\text{C} / 122^\circ\text{F} \text{ (current ambient temperature)}) - (40^\circ\text{C} / 104^\circ\text{F} \text{ (operating temperature)}) = 10^\circ\text{C} / 50^\circ\text{F}$

Subject to change



Is the current ambient temperature less than the temperature of the operating conditions

$(0^{\circ}\text{C} / 32^{\circ}\text{F} \text{ (operating temperature)}) - (-5^{\circ}\text{C} / ^{\circ}\text{F} \text{ (current ambient temperature)}) = 5^{\circ}\text{C} / 41^{\circ}\text{F}$

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