Clamp Meter PCE-DC 20

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AC / DC digital multimeter with direct frequency measurement on the clamp / LCD display / Automatic shutdown when not in use / Current measurement up to 1000 A / For mobile use / Current clamp opening 40 mm (1.6 in)

The digital multimeter is a versatile measuring instrument for the determination of currents, voltages and many other electrical quantities. With a current clamp opening of 40 mm / 1.6 in, even cables with a larger diameter can be tested with the digital multimeter. Thus, with the digital multimeter, current measurements of up to 1000 A AC / DC are possible.

The user can perform frequency measurements with this digital multimeter. This ensures contactless frequency measurement with the digital multimeter. Thus, the digital multimeter is a useful addition to the equipment of an electrician.

▶ Current clamp opening 40 mm / 1.6 in
▶ Backlit LCD display
▶ Automatic shutdown
▶ Ready for operation after switching on
▶ Extensive measuring functions
▶ Measuring range is selected automatically

Subject to change

Specifications

DC power

measuring range	Resolution	Accuracy
400 A	0.1 A	± 3% + 5 digits
600 A	1 A	± 3% + 5 digits
1000 A	1 A	± 3% + 6 digits

Overvoltage protection: 120% of the measuring range for a maximum of 60 seconds

AC power

measuring range	Resolution	Accuracy
400 A	0.1 A	± 3% + 5 digits
600 A	1 A	± 3% + 5 digits
1000 A	1 A	± 3% + 6 digits

Frequency range: 50 ... 60 Hz

Overvoltage protection: 120% of the measuring range for a maximum of 60 seconds

DC voltage

measuring range	Resolution	Accuracy
4V	1 mV	± 0.5% + 5 digits
40V	10 mV	± 0.5% + 5 digits
400V	0.1V	± 0.5% + 5 digits
600V	1V	± 1% + 5 digits
1000V	1V	± 1% + 5 digits

Input impedance: 10 MΩ

Overvoltage protection: 1000V DC or 700V AC RMS

AC voltage

measuring range	Resolution	Accuracy
4V	1 mV	± 1.2% + 5 digits
40V	10 mV	± 1.2% + 5 digits
400V	0.1V	± 1.2% + 5 digits
600V	1V	± 2% + 5 digits
1000V	1V	± 2% + 5 digits

Input impedance: 10 MΩ

Overvoltage protection: 1000V DC or 700V AC RMS

Frequency range: 40 ... 400 Hz

Resistance

measuring range	Resolution	Accuracy
400 Ω	0.1 Ω	± 1% + 5 digits
4 kΩ	1 Ω	± 1% + 5 digits
40 kΩ	10 Ω	± 1% + 5 digits
400 kΩ	0.1 kΩ	± 1% + 5 digits
4 MΩ	1 kΩ	± 1% + 5 digits
40 MΩ	10 kΩ	± 2% + 5 digits

Overvoltage protection: 250V AC / DC RMS

Frequency (direct)

measuring range	Resolution	Accuracy
40 Hz	1 Hz	± 0.1% + 1 digits
400 Hz	1 Hz	± 0.1% + 1 digits
4 kHz	10 Hz	± 0.1% + 1 digits
40 kHz	100 Hz	± 0.1% + 1 digits
100 kHz	100 Hz	± 0.1% + 1 digits

Measuring range: 1 ... 10V RMS, 40 Hz ... 100 kHz

Frequency (current clamp)

measuring range	Resolution	Accuracy
40 Hz	0.01 Hz	± 0.1% + 1 digits
400 Hz	0.1 Hz	± 0.1% + 1 digits

Frequency range: 40 ... 400 Hz (> 20 A)

Further measuring functions

Continuity test	Beep at < 40 Ω
Diode test	Indicates the forward voltage

General specifications

Measuring rate	2 ... 3 measurements per second
Display	LCD 3999 digits
Measuring range selection	Automatically
Automatic shutdown	After 30 minutes non-use, deactivatable
Maximum forceps opening	40 mm / 1.6 in
Coefficients	0.1 x accuracy x °C / °F*
Maximum voltage	1000V CAT II, 600V CAT III
Maximum working height	2000 m / 6561 ft
Operating conditions	5 ... 35°C, < 75% rh
Storage conditions	-10 ... 35°C, < 75% rh
Power supply	3 x 1.5V AAA batteries
Dimensions	225 x 86 x 32 mm / 8.9 x 3.4 x 1.3 in
Weight	About 330 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°C / 122°F (current ambient temperature)) - (40°C / 104°F (operating temperature)) = 10°C / 50°F

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

(0°C / 32°F (operating temperature)) - (-5°C / 23°F (current ambient temperature)) = 5°C / 41°F