

# Clamp Meter PCE-DC 9EV



**Clamp meter with a measuring range of 0 ... 1000 A AC/DC / Frequency measurement  
Small and compact design / Inrush current measurement / Ready for immediate use /  
25 mm wide clamp opening / Optionally with ISO certification**

The clamp meter is a measuring device for the precise determination of electrical currents. With a current clamp diameter of 25 mm and a measuring range of 0 ... 1000 A AC/DC, the clamp meter covers a large part of all measurement tasks. The current measurement is carried out inductively with the clamp meter. This means that the test objects to be measured do not have to be switched off beforehand. In this way, the flowing current can be measured during operation. The measured value is displayed numerically and graphically using a bar chart. The compact design of the clamp meter also enables the measuring device to be easily stowed away in work bags.

Electromobility is playing an increasingly important role. It is therefore important to know the current flow in the lines. The wallbox of an electric vehicle can be monitored on the primary and secondary side with the clamp meter. The clamp meter can also be used in workshops to check electric vehicles. The starting current of the electric motors or the on-board current can be checked with the clamp meter.

In addition to the normal measuring mode, the clamp meter can also measure the inrush current. An inrush current measurement with the clamp meter is particularly necessary when starting up motors, such as ventilation systems, in order to rule out possible sources of error. In addition, the clamp meter has a low-pass filter function. This function can be used to determine currents in the low frequency range. Currents up to a frequency of 1 kHz are measured by the current clamp. The clamp meter is used, for example, to measure the current of low-midrange speakers (woofers).

- ▶ Inductive current measurement
- ▶ Measuring range 0 ... 1000 A AC/DC
- ▶ Backlight
- ▶ Small and compact design
- ▶ 25 mm / 0.98" wide inner diameter
- ▶ Inrush current measurement

# Specifications

## Direct current

Measuring range	0 ... 4 A DC
Resolution	1 mA DC
Accuracy*	$\pm 1.5$ % of measured value $\pm 3$ digits

Measuring range	0 ... 40 A DC
Resolution	10 mA DC
Accuracy*	$\pm 1.5$ % of measured value $\pm 3$ digits

Measuring range	0 ... 400 A DC
Resolution	100 mA DC
Accuracy*	$\pm 1.5$ % of measured value $\pm 3$ digits

Measuring range	0 ... 900 A DC
Resolution	1 A DC
Accuracy*	$\pm 1.5$ % of measured value $\pm 3$ digits

Measuring range	900 ... 1000 A DC
Resolution	1 A DC
Accuracy*	$\pm 2.0$ % of measured value $\pm 3$ digits

Overload protection 1000 A DC

## Alternating current

Measuring range	0 ... 4 A AC
Resolution	1 mA AC
Accuracy*	$\pm 1.5$ % of measured value $\pm 3$ digits (50 / 60 Hz) $\pm 2.0$ % of measured value $\pm 4$ digits (40 ... 400 Hz)

Measuring range	0 ... 40 A AC
Resolution	10 mA AC
Accuracy*	$\pm 1.5$ % of measured value $\pm 3$ digits (50 / 60 Hz) $\pm 2.0$ % of measured value $\pm 4$ digits (40 ... 400 Hz)

Measuring range	0 ... 400 A AC
Resolution	100 mA AC
Accuracy*	$\pm 1.5$ % of measured value $\pm 3$ digits (50 / 60 Hz) $\pm 2.0$ % of measured value $\pm 4$ digits (40 ... 400 Hz)

Measuring range	0 ... 900 A AC
Resolution	1 A AC

# More information

More product info



Similar products



Subject to change

Accuracy\*  $\pm 1.5$  % of measured value  $\pm 3$  digits (50 / 60 Hz)  
 $\pm 2.0$  % of measured value  $\pm 4$  digits (40 ... 400 Hz)

Measuring range 900 ... 1000 A DC

Resolution 1 A AC

Accuracy\*  $\pm 2.0$  % of measured value  $\pm 3$  digits (50 / 60 Hz)  
 $\pm 2.5$  % of measured value  $\pm 4$  digits (40 ... 400 Hz)

Overload protection 1000 A AC

TrueRMS, crest factor up to 3%

\*With a crest factor of  $> 2\%$ , the accuracy increases by a further 2%

### Frequency

Measuring range at 4 A AC 1 ... 10 Hz  
Resolution 0.1 Hz  
Minimum current 0.2 A AC  
Accuracy  $\pm 0.5$  % of measured value  $\pm 2$  digits

Measuring range at 4 A AC 10 ... 4 kHz  
Resolution 0.1/1 Hz  
Minimum current 0.08 A AC  
Accuracy  $\pm 0.5$  % of measured value  $\pm 2$  digits

Measuring range at 4 A AC 4k ... 40 kHz  
Resolution 1/10 Hz  
Minimum current 0.20 A AC  
Accuracy  $\pm 0.5$  % of measured value  $\pm 2$  digits

Measuring range at 40 A AC 1 ... 10 Hz  
Resolution 0.1  
Minimum current 1.5 A AC  
Accuracy  $\pm 0.5$  % of measured value  $\pm 2$  digits

Measuring range at 40 A AC 10 ... 4 kHz  
Resolution 0.1/1  
Minimum current 0.8 A AC  
Accuracy  $\pm 0.5$  % of measured value  $\pm 2$  digits

Measuring range at 400 A AC 2 ... 4 kHz  
Resolution 0.1/1  
Minimum current 4 A AC  
Accuracy  $\pm 0.5$  % of measured value  $\pm 2$  digits

Measuring range at 1000 A AC 1 ... 4 kHz  
Resolution 0.1/1

Subject to change



Minimum current	40 A AC
Accuracy	±0.5 % of measured value % ± 2 digits

Overload protection 1000 A AC

#### **Inrush current**

Measuring range	4 A AC
Trigger current (threshold value)	0.2 A AC
Measuring range	40 A AC
Trigger current (threshold value)	2 A AC
Measuring range	400 A AC
Trigger current (threshold value)	20 A AC
Measuring range	1000 A AC
Trigger current (threshold value)	200 A AC

Integration time 100 ms

Overload protection 1000 A AC/DC

#### **Alternating current low-pass filter (LPF)**

Measuring range	4 A AC
Resolution	0.001 A AC
Accuracy	3 % ±5 digits
Measuring range	40 A AC
Resolution	0.01 A AC
Accuracy	3 % ±5 digits
Measuring range	400 A AC
Resolution	0.1 A AC
Accuracy	3 % ±5 digits
Measuring range	0 ... 900 A AC
Resolution	1 A AC
Accuracy	3 % ±5 digits
Measuring range	900 ... 1000 A AC
Resolution	1 A AC
Accuracy	4 % ±5 digits

The low-pass filter refers to a frequency up to 1 kHz

#### **Further specifications**

All accuracies apply in an environment between 18 ... 28 °C / 64 ... 82 °F

Clamp meter inner diameter	25 mm / 0.98"
Display	LC display
Measuring range selection	manual
Power supply	2 x 1.5 V AAA batteries
Power consumption	22 mA with background lighting switched off
Measuring rate	3 Hz with numerical view 30 Hz with bar graphs
Operating conditions	-10 ... 50 °C / 14 ... 122 °F, <85 % RH, non-condensing

Subject to change

Storage conditions	-20 ... + 60 °C / -4 ... 140 °F, <75 % RH, non-condensing
Maximum altitude	2000 m / 6561 ft
Dimensions	152 mm x 66 mm x 36 mm / 5.98 x 2.59 x 1.41"
Weight	190 g / 6.7 oz (with batteries)

Subject to change