

CLAMP METER

PCE-830-1



- » **Analysis of a network of 3 phases / 4 conductors, 3 phases / 3 conductors, 1 phase / 2 conductors, 1 phase / 3 conductors**
- » **Measures effective real value (V 123 and I 123)**
- » **Measures active power (W, KW, MW, GW)**
- » **Measures apparent and reactive power (KVA, KVAR)**
- » **Power Factor (PF), phase angle (°)**
- » **Measures energy and work (Wh, KWh, KVARh, PFh)**
- » **Measures current from 0.1 mA to 3000 A, allowing for the reserve power of a factory to be determined**
- » **Large LCD that shows up to 35 parameters simultaneously (3P4W [=3 phases/4 conductors])**

The PCE-830 Clamp Meter is used for measuring one to three phases of electrical quantities for alternating current (AC). This 3-Phase Clamp Meter also measures parameters such as voltage, current, frequency, harmonics, and power as well as indicating, according to standard EN50160, harmonic values, interharmonics, and asymmetries. Interference, such as interruptions, leaks, overloads, or transience (from 16 μ s) are detected with their corresponding values. The backlit LCD, with high resolution, can show up to 35 parameters simultaneously. Up to 3 clips can be attached at the same time to the Clamp Meter. In data logger mode, it can save up to 17,470 readings (3 phases / 4 conductors), in a simpler set up (1 phase / 2 conductors) it can save up to 52,400 readings, split into 85 groups. All this makes the PCE-830 Clamp Meter the ideal instrument for taking measurements over long durations. Measurement values obtained can be sent to a computer and be processed with the included analysis software. The device comes with everything needed to be measuring and analysing from the moment it arrives. Although the Clamp Meter comes calibrated from the manufacturer, an optional laboratory calibration and certificate, that meets ISO standards, can be ordered separately with the device or when a recalibration is required.

Specification

AC voltage

Measuring range 20 ... 500 V

Accuracy $\pm 0.5\%$ ± 5 digits

Alternating current AC

Measuring range 0,04 ... 100 A

Accuracy $\pm 0.5\%$ ± 0.05 A

Overload Overload protection AC 200 A

Phase angle

Measuring range -180 ... +180 °

Accuracy $\pm 1^\circ$

Power factor

Measuring range 0 ... 1

Accuracy ± 0.04

Frequency

Measuring range 45 ... 65 Hz

Resolution 0,1 Hz

Accuracy 0.1 Hz

General technical data

Measuring functions HOLD

Frequency 50 ... 60 Hz

Display type LCD with backlight

Display size 4,9 in

Storage medium Internal memory

Storage capacity 52420 Values

Storage interval from 2 s

Storage interval to 3000 min.

Interface RS232, USB

Standard(s) IEC 61010

Maximum cable diameter 30 mm

Safety standard CAT III 600V

Menu language English

Power supply 12V

Connector type Device-europlug

(Rechargeable) battery 8 x 1,5 V AA battery , Alkali-manganese

Capacity 3000 mAh

Operating conditions -10 ... 50 °C , 0 ... 75 % RH

Storage conditions -20 ... 60 °C , 0 ... 75 % RH

Dimensions (L x W x H) 257 x 155 x 57 mm

Other dimensions Current clamp PCE-6801 210 x 62 x 36 mm

Weight 1160 g

Other weights Current clamp PCE-6801 200g