



## Class 2 Data Logging Sound Level Meter with Certificate

**PCE-428**

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**PCE-428 Class 2 Data-Logging Sound Level Meter**  
**Portable high-accuracy decibel meter with 1/1 octave band filter (optional 1/3 octave band filter upgrade) / Includes factory calibration certificate according to ISO 9001**

PCE-428 is a class 2 data-logging sound level meter that meets IEC 60651:1979, IEC 60804:2000, IEC 61672-1:2013, ANSI S1.4-1983 and ANSI S1.43-1997 requirements. This portable high-accuracy sound level meter has a large easy-to-read illuminated LCD screen that displays the sound pressure level (SPL) numerically and graphically in real time. Thanks to octave band filtering, even the slightest difference in frequency is detected.

The handheld meter also functions as a data logger, recording measurements at an adjustable interval from 1 s ... 24 h and storing the recorded measurement data to a micro SD card memory. The SD card can be removed from the meter and inserted into the SD card reader of a PC. Alternatively, the decibel meter can be connected directly to a PC via USB. The provided PC-compatible software allows for quick and easy data analysis.

This device measures from 25 ... 136 db(A) at a frequency of 20 Hz ... 12.5 kHz. The meter features A, B, C and Z frequency weightings as well as fast, slow and impulse time weightings. The PCE-428 decibel meter is commonly used by professionals to ensure compliance with environmental noise regulations and workplace noise permissible exposure limits.

- Accuracy class 2
  - A, B, C and Z frequency weightings
  - Fast, slow and impulse time weightings
- 1/1 octave band filter (optional 1/3 octave band filter upgrade - see drop-down menu above)
  - Adjustable data-recording interval from 1 s ... 24 h
  - Real-time numerical and graphical LCD display
  - Adjustable alarm
- Includes factory calibration certificate according to ISO 9001

### Specification

Measuring range	25 ... 136 db(A)
Accuracy	Class 2
Frequency range	20 Hz ... 12.5 kHz
Standards	GB/T 3785.1-2010 GB/T 3785.2-2010 IEC 60651:1979 IEC 60804:2000 IEC 61672-1:2013 ANSI S1.4-1983 ANSI S1.43-1997
Frequency analysis	1/1 Octave band filter: 20 Hz ... 8 kHz 1/3 Octave band filter: 20 Hz ... 12.5 kHz

Microphone	1/2" Microphone Class: 2 Sensitivity: 40 mV/PA Frequency range: 20 Hz ... 12.5 kHz Connection: TNC Power supply: ICCP Standard
Data-logging interval	1 s ... 24 h (adjustable)
Measuring functions	LXY (SPL), LXeq, LXYSd, LXSEL, LXE, LXYmax, LXYmin, LXPeak, LXN X = Frequency weighting: A, B, C, Z Y = Time weighting: F, S, I N = Statistics in %: 1 ... 99 %
Frequency weightings	A, B, C, Z
Time weightings	Fast (F) 125ms, Slow (S) 1 sec, Impulse (I) 35 ms
Inherent noise	Microphone: 20 db(A), 26 db(C), 31 db(Z) Electronics: 14 db(A), 19 db(C), 24 db(Z)
AD converter	24 Bit
Sample rate	Standard: 48 kHz LN Mode: 20 ms
Measuring display	Numerical Bar graph Graphical
Display	160 x 160 pixel LCD with backlight
Memory	4 GB Micro SD card
Interface	USB (Memory readable via software or directly as mass storage) RS-232
Voltage output	AC 5V RMS DC 10 mV/db
Alarm	Adjustable
Power supply	4 x 1.5 V AA Batteries 12 V / 1 A Power plug 5 V / 1 A USB
Battery life	Min. 10 h continuous use
Dimensions	70 x 300 x 36 mm / 2.76 x 11.81 x 1.42" (W x H x D)
Weight	Approx. 620 g / 1.4 lbs incl. batteries

**Delivery content**

- 1 x PCE-428 class 2 data-logging sound level meter
- 1 x microphone
- 1 x wind noise suppressor (foam ball)
- 1 x USB cable
- 1 x PC software
- 1 x power supply
- 1 x factory calibration certificate according to ISO 9001
- 1 x user manual
- 1 x carrying case

Note: This meter comes standard with a 1/1 octave band filter. An optional 1/3 octave band filter upgrade is available for an additional fee