



## **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

#### **DATA SHEET**

PCE

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