

Outdoor Decibel Meter Kit PCE-430-EKIT



Professional outdoor decibel meter PCE-430 (class 1) incl. outdoor noise level meter kit

Handheld noise meter and real-time frequency analyzer / Octave bandfilter / Filter upgradeable / Fast, Slow and Pulse Evaluation /

Data logger /USB

The Class 1 outdoor decibel meter PCE-430-EKIT meets all requirements for noise measurement and frequency analysis. This integrated precision pulse decibel meter follows all valid standards and guidelines (Klasse 1 EN/IEC 61672, ANSI S1.4-1983, ANSI S1.43-1997 EN/IEC61260, etc.) The outdoor decibelmeter PCE-430 has a very large illuminated display. The decibel meter display adjusts the sound pressure level numerically and graphically in real time. The professional decibel meter has an integrated data logger. The measurement data is stored on a micro SD card.

This card can be read directly in the PC.Likewise, the outdoor decibel meter can be connected to the PC via USB and the memory can be read out. The post-processing software from the decibel meter allows convenient measurement data analysis. The typical applications for this instrument are the measurement of workplace noise, compliance, environmental noise detection, selection of hearing protector selection, selection of appropriate noise abatement measures and noise exposure estimation.

PCE-4xx-EKIT

An additional kit for outdoor sound measurement PCE-4xx-EKIT can be combined with the decibelmeters PCE-428, 430 or PCE-432. This kit makes it possible to measure the outdoor noise with a noise meter over a long period of time. The environmental noise monitoring system consists of a waterproof Peli carrying case with rollers. A charger and two additional lead gel batteries are installed in this case, which allows an operation of the sound monitor for up to 10 days. During the outdoor sound measurement, the case may remain closed. Due to the external connections for the microphone and the power supply all electronic components are protected from water.

The delivery scope of the outdoor sound monitor includes rain and wind protection as well as a wire mesh for the microphone. Also, a tripod is available with which the microphone can be placed outdoors. Also, the charger in the measuring kit PCE-4xx-EKIT is waterproof. So, the charger may also remain outdoors. The outdoor noise meter can be used, for example, for the sound measurement of road noise, aircraft and train noise, event noise, etc. The weather does not matter, hail, snow and rain are no problem for the kit for outdoor noise. If the PCE-432 noise meter is combined with this measuring kit, it is even possible that the exact location of the sound level metering around the outside area is assigned via the GPS receiver.

The pulse function of the PCE-430 allows you to record short-term sound events. Thanks to the integrated octave band function even the smallest differences in the frequency band can be detected. The frequency filter can be optionally upgraded. The measuring range of this professional sound level meter ranges from 22 ... 136 db (A) at a frequency of 3 Hz ... 20 kHz.

Subject to change

- ▶ 1/1 octave band included
- ▶ 1/3 octave band optional
- ► Accuracy class 1
- ▶ A, B, C & Z frequency rating
- ▶ Fast, Slow, Pulse and Peak time weighting
- ▶ Statistics function
- ▶ Display of the sound profile as a graph
- ▶ 3 measuring profiles adjustable
- ▶ Low inherent noise
- ▶ ICCP microphone 40 mV /PA
- ► Alarm level adjustable

Specifications

Measuring range 22 ... 136 dbA

Accuracy Class 1

Frequency range 3 Hz ... 20 kHz

Standards GB/T3785.1-2010

GB/T3785.2-2010 IEC60651:1979 IEC60804:2000 IEC61672-1:2013 ANSI S1.4-1983 ANSI S1.43-1997

Frequency analysis Octave band filter: 8 Hz ... 16 kHz

1/3 Octave band filter: 6.3 Hz ... 20 kHz

Microphone 1/2" measurement microphone class 1

Sensitivity: 40 mV/PA

Frequency range: 3 Hz ... 20 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 %

24 hour measurement Automatic measurement with data storage

Frequency weightings A, B, C, Z

Time weightings Fast (F), Slow (S), Pulse(I), Peak

Inherent noise Microphone: 19 db(A), 25 db(C), 31 db(Z)

Electronics: 13 db(A), 17 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

Subject to change

Interface USB (Memory readable via software or directly as mass

storage)

RS232

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

Operating time battery

min. 10 h

mode

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

Transport case PELI 1510 with rollers with grid foam

Protection IP65

Outdoor Noise Level MeterKit

Connections on the

Microphone: TNC

suitcase

12 V charging voltage: XLR

110 V / 230 V charging voltage: PowerCon TRU

Charger Victron Blue Smart 12 V / 4 A IP65

Internal batteries 2 x 12 V / 12 Ah lead gel

Battery running time min. 10 days

with charger EU Version: 180 ... 265 V AC

Power supply with charger US Version: 100 ... 130 V AC

battery operation: 2 x 12 V / 12 Ah

Cable length

Microphone cable: 2 m / 6 ft 6" with TNC connector

Power supply: 2 m / 6 ft 6" with PowerCon TRU

Dimensions 56 x 35 x 23 cm / 2.2 x 1.3 x 0.9"

ca. 14 kg / 30 lb 13 oz with batteries Weight

ca. 8 kg / 17 lb 10 oz without batteries