

# Sound level meter

## testo 816-1 – Sound level measurement with integrated data storage

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Sound level measurement acc. to IEC 61672-1 class 2 and ANSI S1.4 Type 2

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Frequency weighting A and C

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Integrated data storage for up to 31000 measurement values

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Software for data management and long-term measurement

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Switchable time weighting Fast/Slow

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Bar graph display

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Backlit display

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AC and DC output for the connection of other instruments

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dB

The testo 816-1 is ideal for sound level measurements at workplaces, in industrial and production halls, and in public places. With the touch of a button, the measuring instrument can be switched from Slow (1 sec.) to Fast (125 ms). It is also possible to switch between the frequency weighting characteristic curves A and C and vice versa, also at the touch of a button. Characteristic curve A corresponds to the sound pressure sensitivity of the human ear, while characteristic curve C can evaluate low-frequency components of a noise.

The integrated data store allows the storage of over 30000 measurement values in the instrument, these can be administered using the software included in delivery. In addition to this, the software allows online measurements over a longer period to be carried out. With the optional sound calibrator and the adjustment accessory included with it, the testo 816-1 can be re-calibrated on site.

# Technical data / Accessories

**testo 816-1**

testo 816-1, sound level meter incl. microphone, wind protection, PC software (in English), connection cable, manual on CD and batteries in system case

Part no. 0563 8170



**Technical data testo 816-1**

Measuring range	30 to 130 dB
Frequency range	20 Hz to 8 kHz
Accuracy ±1 digit	±1.4 dB (under reference conditions: 94 dB, 1 kHz)
Resolution	0.1 dB
Frequency weighting	A / C
Microphone	½ inch
Measuring rate	0.5 s
Dynamic range	100 dB
Data storage	Internal (in instrument): Single value memory: 99 data sets Measurement series memory: 31,000 data sets External (via PC software): Online measurement: max. 99,999 data sets
Recording rate	Offline measurement: min: 1 sec, max: 1 min Online measurement: min: 0.1 sec, max: 30 sec
Operating temperature	0 to +40 °C
Storage temperature	-10 to +60 °C
Battery type	4 x Type AA batteries
Weight	390 g
Dimensions	272 x 83 x 42 mm
Time weighting	FAST 125 ms / SLOW 1 sec
AC/DC output	AC: 1 V RMS at full scale DC: 10 mV/dB

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Subject to change without notice.

**Technical data sound level calibrator**

Battery type	9V block battery
Battery life	40 h
Accuracy	±0.5 dB in accordance with Class 2 to IEC 60942

Sound pressure level: 94 dB/104 dB, switchable  
Frequency: 1000 Hz  
Also suitable for ½ and 1 inch microphones by other manufacturers

**Accessories for measuring instrument**

**Part no.**

Calibrator, for regular calibration of testo 815, testo 816-1	0554 0452	
ISO calibration certificate; sound level calibrators and pistonphones on two fixed sound pressure values	0520 2810	
ISO calibration certificate pressure		
<b>Pressure chamber calibration</b> – calibration at the measuring points 94 dB/1000 Hz and 114 dB/1000 Hz for up to three frequency evaluations (A, C and Z)	0520 2812	
<b>Free-field calibration</b> – calibration of the amplitude frequency response in the free field at fixed frequencies in third interval. Possible frequency range 125 Hz to 20 kHz.	0520 2812	
<b>Free-field and pressure chamber calibration</b> – calibration of the amplitude frequency response at fixed frequencies in third interval. Possible frequency range 31.5 Hz up to 20 kHz.	0520 2812	

