

## 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 memory allows the storage of over 30,000 measurement values in the instrument, which can be managed using the convenient PC software (download from [www.testo.com](http://www.testo.com)). 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 and batteries in system case

Part no. 0563 8170



#### 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

#### 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

#### Accessories for measuring instrument

#### Part no.

Calibrator, for regular calibration of testo 815, testo 816-1	0554 0452	
PC software testo 816-1 (download from <a href="http://www.testo.com">www.testo.com</a> )	0501 8170	
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) <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. <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 0520 2812 0520 2812	