

# CEL-120 Acoustic Calibrator



Actual Size



## The Smallest Acoustic Calibrator in the World

The CEL-120 Acoustic Calibrator is the smallest of its type in the world; with a rugged, over-moulded design for use in field environments.

The field calibration of Sound Level Meters is an essential procedure when carrying out any type of noise survey both before and after each measurement sequence. This ensures that instruments are providing consistently accurate readings necessary for monitoring to ensure compliance with workplace and environmental noise regulations.

The CEL-120 is therefore designed and manufactured to comply with the requirements of IEC 60942: 2003 and ANSI S1.40: 2006. These standards stipulate accurate calibration over a wide range of temperature, humidity and pressure conditions, typical of field work, ensuring accurate calibration in all conditions.

### Key Features

- Compliant with IEC 60942: 2003 and ANSI S1.40:2006
- Class 1 & 2 accuracy versions
- Digital technology ensures highly stable acoustic performance
- Dual calibration level (Class 1 version) of 94dB and 114dB at 1kHz
- Rugged, ergonomic design
- Simple to use with incorrect microphone insertion warning
- Automatic power off to conserve life of battery, typically 2 years

## Digital technology for optimum accuracy

The CEL-120 is compact and ergonomically designed with simplicity and ease of use being the highest priorities. Key features include a simple keypad for intuitive control, permitting calibration level changes when required. When used with instruments like the CEL-600 series, calibration routines commence automatically as soon as a calibration tone is detected to further simplify the task.

The CEL-120 uses a MEMS microphone and a digital feedback loop to maintain the acoustic pressure in the cavity at the required level. An indicator shows if the sound level meter microphone is incorrectly inserted into the cavity, removing any potential for calibration error.

The microprocessor control detects when the microphone is removed and automatically switches off the calibration tone. This conserves battery power, allowing batteries to last for up to 2 years of operation.

Both the CEL-120/1 and CEL-120/2 calibrator accept all industry standard 1/2" microphone capsules. Smaller 1/4" microphones may be accommodated using the 1/2" to 1/4" adaptor (CEL-4726). The relevant CEL-120 also comes as standard with our range of noise monitoring kits.

Technical Specification	
Type:	CEL-120/1: Calibrator to EN (IEC) 60942: 2003, ANSI S1.40: 2006 Class 1 CEL-120/2: Calibrator to EN (IEC) 60942: 2003, ANSI S1.40: 2006 Class 2
Calibration sound pressure level (over environmental range):	CEL-120/1: 114.0dB $\pm 0.4$ dB and 94.0dB $\pm 0.4$ dB CEL-120/2: 114.0dB $\pm 0.6$ dB
Calibration level (at reference conditions):	CEL-120/1: 114.0 dB $\pm 0.25$ dB and 94.0 dB $\pm 0.25$ dB, CEL-120/2: 114.0 dB $\pm 0.35$ dB
Calibration Frequency:	1kHz $\pm 1$ Hz
Harmonic Distortion:	Less than 1.0%
Battery:	2 x 1.5V AAA (LR03)
Battery life:	A typical operational life of 2 years
Dimensions:	75.5 x 54.0 x 37.0mm (2.9 x 2.1 x 1.4")
Weight:	85g (0.19lb) including batteries

Ordering Information	
	CEL-120/1 Dual level (94dB and 114dB) Class 1 Calibrator. Including batteries, operating instructions and calibration certificate.
	CEL-120/2 114dB Class 2 Calibrator. Including batteries, operating instructions and calibration certificate.

Optional	
	CEL-4726 1/4" to 1/2" coupler for CEL-120 calibrator.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.