

511F

CR:

CR:511F Acoustic Calibrator

Features

- **Conforms to IEC 60942:1988 Class 1L**
- **PTB Type Approval No.**

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- **94dB & 104dB SPL Output**
- **1kHz Output Frequency**
- **Long Battery Life**
- **Calibration Adaptors available**

Overview

The CR:511F is a precision acoustic calibrator designed for the field calibration of Sound Level Meters, Personal Noise Dosimeters and Noise Monitoring systems. The unit is a member of the CR:510 family of Acoustic Calibrators, and provides output levels of 94dB and 104dB SPL at a frequency of 1kHz.

The CR:511F meets the requirements of IEC 60942:1988 for Class 1L and has PTB Type Approval. The PTB is the official German National Test Laboratory and is amongst the most prestigious in the world. The nominal cavity diameter is 1.125", but the standard QC:3 adaptor provides a cavity to suit 1/2" microphone capsule.

A range of calibration adaptors is available for the CR:511F to allow the unit to be used with different microphone capsules. A reference barometer, the CR:590, is available and is required where the Type Approval of the instrument is important.



CR:511F

Specification.

Standardisation to IEC 60942:1988 Sound Calibrators

CR:511F	Class 1L		
Type Approval	PTB No. <table border="1"><tr><td>21.51</td></tr><tr><td>00.02</td></tr></table>	21.51	00.02
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Output Level re 20 μ Pa (SPL) CR:511F	94dB & 104dB \pm 0.3dB		
Output Frequency	1kHz \pm 1.5%		
Reference Conditions			
Temperature	20°C		
Barometric Pressure	101.3kPa		
Relative Humidity	65% RH		
Stability	0.1dB		
Harmonic Distortion	Less than 2%		
Variation with Temperature	To IEC 942 Class 1L		
Variation with Barometric Pressure	See Curves or CR:590 barometer		
Operating humidity	10 to 90% relative humidity		
Operating Temperature	-10°C to +50°C		
Storing temperature	-20°C to +60°C		
Long Term Drift	Better than \pm 0.1dB		
Effective Volume	40 cm ³		
Cavity Diameter	1.125 inch with Q3 Adaptor for 1/2" Microphones		
Battery	1 x 9v 6F22 (Neda 1604)		
Weight with battery	220g		
Dimensions	135mm x 48mm		



Notes

The Type Approval is for a CR:511F Acoustic Calibrator fitted with a QC:3 1/2" adaptor and used with a CR:590 Barometer for correction if the barometric pressure deviates from 101.5kPa

The designation of Class 1L indicates Class 1 performance over a restricted temperature range of -10°C to +50°C and a restricted barometric pressure range of 85kPa to 105kPa.

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