MICROTECH GEFELL



microphones & acoustic systems - founded 1928 by Georg Neumann

4010

Sound Calibrator

Class 1 according IEC 60942

- frequencies 250 Hz and 1000 Hz
- sound pressure levels 94 dB and 114 dB
- microphones 1", 1/2" and 1/4"
- PTB Type-examination Certificate



The 4010 is a sound calibrator conforming to IEC 60942 class 1 and ANSI S1.40 for the calibration and the verification of microphones and sound level meters. The combination of two sound pressure levels and two frequencies allow both level linearity and frequency linearity to be verified. Each sound calibrator is supplied with an individual calibration certificate.

The reference microphone and control circuit together maintain a constant sound pressure level inside the calibration coupler and automatically adjust for changes in load volume, temperature, atmospheric pressure and relative humidity. In addition the sound calibrator measures the environmental conditions temperature, atmospheric pressure and relative humidity.

Delivery

with 1/2"-adapter 4010-2 in a leather case 110 mm x 60 mm x 50 mm

black	order number 610201

Accessories

adapter 1/2"	4010-2	order number 600203
adapter 1/4"	4010-3	order number 600204





Temperature measurement	Range	-10°C to +50°C
	Accuracy	±2°C
	Resolution	0.1°C
Atmospheric pressure measurement	Range	65 kPa to 108 kPa
	Accuracy	\pm 0.4 kPa
	Resolution	0.1 kPa
Relative humidity measurement	Range	25% to 90%
	Accuracy	$\pm 4\%$
	Resolution	1%
Levels and frequencies at reference conditions	250 Hz (251.19±0.30Hz)	(114.0±0.2)dB
(23°C / 101.325kPa / 50%rh)	250 Hz (251.19±0.30Hz)	(94.0±0.2)dB
Level in dB relative to $20\mu Pa$	1000 Hz (1000.00±1.00Hz)	(114.0±0.2)dB
	1000 Hz (1000.00±1.00Hz)	$(94.0 \pm 0.2) dB$
Distortion		max. 2.0%
Stabilizing time		20 seconds
Sensitivity to environmental conditions		as specified for
		IEC 60942 Class 1
Microphone size	without adapter	(1/1)"
	with adapter 4010-2	(1/2)"
	with adapter 4010-3	(1/4)"
Battery type	2x LR03	AAA-size
	alkaline batteries	acc. ANSI/NEDA
Power supply		2 V to 3.4 V
Battery life		>10 hours
automatically switching off		
if battery voltage too low		
Mono-colour OLED graphical display	Resolution	128 x 64 (W x H)
LED indicator		two-colour LED
main value of sound pressure level	IEC 60942, 6.3e	114.0 dB
main value of frequency	IEC 60942, 6.3f	250 Hz
Environmental range for specified operation	Temperature	-10°C to +50°C
	Relative humidity	25% to 90%
	Atmospheric pressure	65 kPa to 108 kPa

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