

Special Microphones

Special microphones can be proposed for very specific measurements of very low frequency sound, high level and high frequency sound, high temperature or airflow situation. Please ask your distributor.

ACCESSORIES

Preamplifiers

The type PRE12H 1/2" preamplifiers are used with pre-polarized or externally polarized microphones. They are designed to drive cable lengths up to 30m and all models allow insert calibration. The insert voltage generator is connected via the output connector. Type 26CA 1/2" ICP® preamplifier with standard BNC output connector is designed for use with pre-polarized microphones.



The type 26AA, 26AB, 26AC and 26AL 1/4" preamplifiers are small rugged units optimized for acoustical measurements with condenser microphones. They have a very low inherent noise level, a wide dynamic range and a frequency range from below 2 Hz to above 200 kHz. Type 26CB 1/4" ICP® preamplifier with standard BNC output connector is intended for use with pre-polarized microphones. Special 1/4" to 1/2" adapter is available to use with 1/2" microphones.

Spare parts

Type BAP012 windscreens protect the 1/2" microphone transducer and the preamplifier. 1/2" and 1/4" nosecones allow measurements in laminar airflow and decrease turbulence around the microphone. Different right angle and straight adapters are available for different mounting and adaptation of different microphone and preamplifier sizes.

Calibrators

The calibrators* Cal01 and Cal02 are sound pressure sources dedicated to the on-site calibration of noise measurement systems before and after each measurement session, as defined in most regulations.

Battery operated and lightweight, they comply with the specifications of the IEC942 standard as either class 1 (Cal01) or class 2 (Cal02) acoustic calibrators.

These devices may be used with either typical sound level meters or PC-based noise measurement systems independently of the weighting network or filter used because of a nominal 1 kHz calibration frequency.

Cal01 and Cal02 are designed for use with 1" microphones and delivered with a 1/2" microphone adapter.



Complete Solutions

Our range of high-quality microphones and their accessories complement perfectly our PC-based and hand-held measurement systems.

We offer signal conditioning unit like OPUS* for acquisition systems requiring external transducer supply.

Our cables of different lengths are equipped with standard LEMO connectors.



* refer to the appropriate datasheet

Cal01/02

Calibreurs Acoustiques Classe 1 et Classe 2

Présentation



Les calibreurs Cal01 et Cal02 sont des sources de pression acoustique destinées au calibrage de appareils de mesure acoustique sur le site avant et après la mesure, comme le préconise la plupart des normes.

Autonome et de faible encombrement, ils sont proposés en classe 1 (Cal01) et en classe 2 (Cal02) selon les normes nationales et internationales en vigueur.

Ces appareils permettent le calibrage de sonomètres et autres chaînes de mesure indépendamment de la pondération ou filtre utilisé.

De forme quasi cylindrique, le calibreur se manipule avec facilité. Il possède un seul bouton poussoir pour la mise en route et l'émission du niveau de pression acoustique. Il s'arrête automatiquement sans intervention de l'opérateur.

Le niveau de pression acoustique nominal de 94dB à 1000 Hz autorise une utilisation sans altération sur site en présence d'ambiances sonores.

Dans des situations plus bruyantes le niveau de pression acoustique du Cal01 peut être augmenté de 20dB ou bien diminué de 20dB pour, par exemple, mémoriser sur enregistreur numérique de type DAT un signal de calibrage.

Afin d'obtenir un calibrage de qualité lors des variations importantes des conditions ambiantes d'utilisation, les calibreurs Cal01 et Cal02 possèdent un système de contrôle acoustique électronique piloté par microprocesseur.

Principales caractéristiques

Réglementation

- Calibreurs acoustiques Classe 1 (Cal01) / Classe 2 (Cal02) selon les normes NF S 31-139 et CEI942 (1988)

Caractéristiques métrologiques (20°C, 1013hPa et 65% HR)

Référence	Cal01	Cal02
Niveau nominal	94 ± 0.3 dB	94 dB ± 0.5 dB
Amplification	+20dB / -20dB	
Stabilité (meilleure que)	± 0.1 dB	± 0.2 dB
Fréquence	1 kHz ± 2 %	1 kHz ± 4 %
Stabilité (meilleure que)	± 0.5 %	± 1 %
DHT inférieure à	3 %	3 %

Caractéristiques générales

- Temps de stabilisation indiqué par voyant lumineux (rouge)
- Durée d'émission supérieure à 1 minute après stabilisation
- Alimentation par pile alcaline 9V (CEI type 6LR61) assurant un fonctionnement continu de 25 heures (20°C)
- Diamètre: 43mm / Hauteur: 90mm / Poids: 180g avec piles

Accessoires

- Livré avec manuel d'utilisation, certificat d'étalonnage, pile alcaline 9V, housse en cuir (Cal01) et adaptateur pour microphone 1/2 pouce
- Bagues d'adaptation microphones 1/4 et 1/8 pouce

Cal01/02

Class 1 and Class 2 acoustic calibrators



Overview

The calibrators Cal01 and Cal02 are sound pressure sources dedicated to the on-site calibration of noise measurement systems before and after each measurement session, as defined in most regulations.

Battery operated and lightweight, they comply with the specifications of the standard IEC942 as either class 1 (Cal01) or class 2 (Cal02) acoustic calibrators.

With its quasi-cylindrical shape, the calibrator is comfortable in the hand, and can be easily used. A single push button enables calibration level. The sound output is stopped automatically without user operation.

These devices may be used with either typical sound level meter or PC-based noise measurement systems independently of the weighting network or filter used because of a nominal sound pressure level of 94dB at 1000 Hz.

In higher background levels, the sound level of Cal01 can be amplified by 20dB or it may be attenuated by 20dB if, for example, a calibration signal is to be recorded on a digital tape recorder (DAT) in order to use the complete dynamic range of the tape.

In order to perform an accurate and valuable calibration in the presence of extraneous noise sources that vary greatly, the calibrators Cal01 and Cal02 feature an acoustic and electronic control system driven by a micro-processor and controlled by an internal reference microphone.

Cal01 and Cal02 are designed for use with 1 inch microphone and delivered with 1/2 inch microphone adapter.

Main characteristics

Type approval

- Acoustic calibrators Class 1 (Cal01) / Class 2 (Cal02) according to IEC 942 (1988). PTB approval.

Metrological characteristics (20°C, 1013hPa and 65% HR)

Reference	Cal01	Cal02
Level	94 ± 0.3 dB	94 dB ± 0.5 dB
Amplification	+20dB / -20dB	
Stability (better than)	± 0.1 dB	± 0.2 dB
Frequency	1 kHz ± 2 %	1 kHz ± 4 %
Stability (better than)	± 0.5 %	± 1 %
THD less than	3 %	3 %

General characteristics

- Stabilisation time indicated by red LED
- Emission duration greater than 1 minute after stabilisation
- Power supply by a 9V alkaline battery (IEC type 6LR61) for 25-hour continuous operation (20°C)
- Diameter: 43mm / Height: 90mm / Weight: 180g with battery

Accessories

- Delivered with calibration certificate, user manual, 9V alkaline battery, leather cover (Cal01) and 1/2 inch microphone adapter
- Optional adapters for 1/4 and 1/8 inch microphones