Qsources

Qref

SOUND POWER
REFERENCE SOURCE

Qref is a monopole source to use as a sound power reference. It allows identification of sound power in any acoustic environment, in accordance with ISO 3747 and even beyond.
Qref is the ideal product for measurements in situ based on a comparison of the sound pressure levels of for example operational machinery on-site with those of the calibrated power reference source.
Another application for Qref includes calibration of measurement rooms or installations in test rooms based on the power reference source, including free field decay measurements.
Qref can also be applied for Statistical Energy Analysis (SEA) type of measurements of rooms, halls, other acoustically coupled systems and other airborne excitation applications.
The sound power reference Source Qref meets the requirement of ISO 6926 and offers a unique solution to measure in non-ideal acoustic conditions. The set includes a dedicated Infra-Qsources QamR amplifier.

Smal & lightweight

Reference source with a weight of only 0.8 kg and a callibrated amplifier of 2.4 kg.

Compact size

With a size of 107mm diameter and a height of 160mm. Includes a tripod and soft carry case

Wide frequency range

1/3 octaves: 50-16000 Hz
High accuracy freq. range: 100-5000 Hz
High level LF output at 50Hz: 97 dB Lw

Work efficiency

Measurements can be taken easlily by one single person with a fast set up,

Highest level specification

Omnni directionality and spectrum are exceeding the standards:
ISO 6926
ISO 3647
ISO 61672-1

www.Qsources.be

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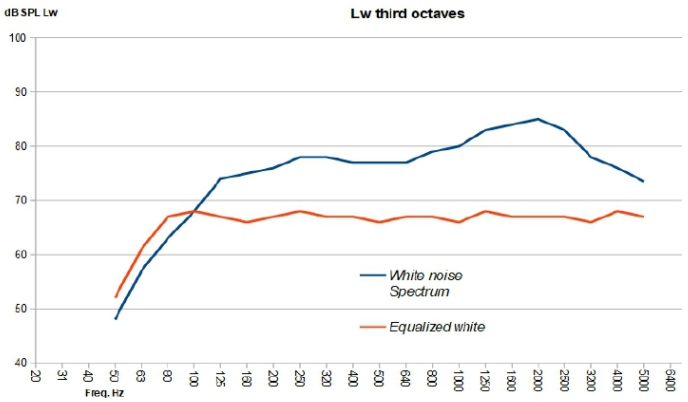
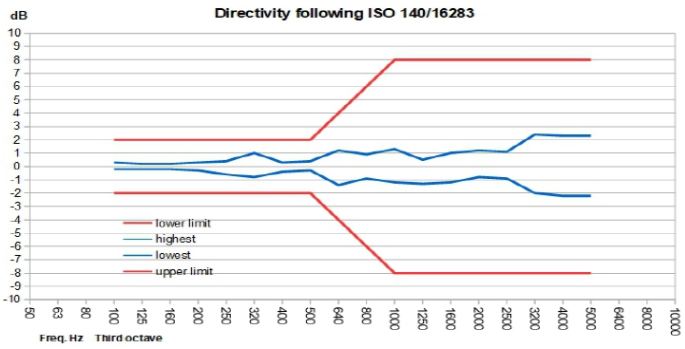
SPECIFICATIONS*	
Description	Sound power reference source
Weight	0.8 kg
Broadband high output	97 dB Lw
Frequency range in third octave bands	100-5000 Hz
Height	160mm
Diameter	107mm
Wide range frequency	100-16000 Hz (third octave)
Omni directionality (ISO 16283)	+-2 dB from 100-5600Hz
Max. Sound power level	97 dB+- 1 dB Lw, 4 minutes**
	90 dB+- 1 dB Lw, 10minutes**
Typical Power requirement	Only operation with QamR power amplifier
Temperature Protection	√
Power overload Protection	√
Main Application area	Machinery Noise, Room calibration
Main Application examples	Production site, Machinery or residential room
Number of Speakers	1
Seperate subwoofer needed	no
Ambient temperature range	20 to 45 degrees celsius
Tripod Included	√
Soft transportation case included	√
Qualtiative, Robust Chassis material	√
Industry Standards	ISO 140 / 3382 / 16283 / 6926 / 3741 / 3747 / ANSI/ASA S12.51





POTENTIAL APPLICATION AREAS	
Building accoustic	√
Road-Railway infrastructure	√
Aerospace	√
Marine	√
Military	√

MEASUREMENT TECHNIQUES	
Room + Hall accoustics	√
Reverberation	√
On-site machinery sound power	√

PART OF:

*These specifications may be adapted if necessary to improve the quality.

**When driven with Qam generated low crest-factor pink noise at 22 Celsius ambient temperature or lower.

*** For maximum performance a dedicated power amplifier type Qam is available from Infra-Qsources

*** Range in free sight. The range can be influenced by metal structures.

Legenda:

√ = Intended application

√ = Possible application

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