

# **Qsources**



Qoms1 is a unique small and lightweight hemispehere monopole point source for broadband measurements. Similar to its fully omni-directional variant Qoms2, the Qoms1 sound source can be used for acoustic optimization of performance sites such as theaters, schools or religious sites for speech and music.

A smooth broadband spectrum of 5O-16OOO Hz and output level of 1O9 dB Lw allow measurement in large spaces, while the hemispherical characteristic make Qoms1 the ideal source for measurements from surfaces such as walls, ceilings or subjects such as machinery. The Qoms1 includes a flexible base for easy placement on a flat surface while using this surface (e.g. walls or ceilings) as a reflector. Thanks to its extreme lightweight of O.9 kg and very compact size, the Qoms1 omni-directional hemisphere source offers a highly efficient alternative to current hemi-dodecahedron loudspeakers as it can be more easily placed and suspended anywhere.





EXTREME LIGHTWEIGHT O.9 KG.



106 MM. DIAMETER 160 MM. HEIGHT



1/3 OCTAVES: 50-16000 Hz. BROADBAND HIGH OUTPUT: 109 dB Lw



WORK EFFICIENCY
EASY & FAST SET UP BY 1 SINGLE PERSON



EXCEEDING THE STANDARDS ISO 3382 / 16283



## **Qsources**

### Qoms1

### SPECIFICATIONS\* Description Monopole hemi-omnidirectional sound source Weight Frequency range in third octave bands 50-16000 Hz (1/3 octaves) Height 160mm Diameter 106mm Axial +-2 dB from 100-Omni directionality (ISO 16283) 16000Hz, Tangential +-5 dB from 100-16000 Hz Sound power level 109 dB Lw, 2 minutes\*\* 103 dB Lw, 15 minutes\*\* Low frequency sound power at 5OHz 84 dB Lw, 2 minutes\*\* in broadband pink noise better than O.5dB: during 10 minutes at 103 dB\*\* Output level stability better than O.5 dB, during 1.5 minute at 109 dB\*\* 100 Watt RMS to 4 Ohm\*\*\* Typical Power requirement **Temperature Protection** Power overload Protection Main Application area Room acoustics impulse responses, room calibration, etc. Main Application examples Performance sites (e.g. recording studio, theatre, and test-rooms) **Number of Speakers** 2 Q4 driver technology Seperate subwoofer needed no

The Qsources Qoms1 sound source can be used in combination with the Qam signal generator and fully DSP controlled measurement amplifier or Qca, compact measurement amplifier. Amplifiers are offered separately.



Content of the shipment:

- Qoms1
- Power Cable (6m.)
- Tripod
- Soft Trolley
- User Guide

POTENTIAL APPLICATION AREAS	
Building accoustic	√
Manufacturing / Material tests	✓
Road-Railway infrastructure	✓
Aerospace	✓
Marine	√
Military	√

M6

10 to 45 degrees celsius

ISO 14O / 3382 / 16283 / 354 / 14275 / DIN5221O / ASTM E2235/

Mounting thread

Tripod Included

**Industry Standards** 

Ambient temperature range

Soft transportation case included

Qualtiative, Robust Chassis material

# MEASUREMENT TECHNIQUES Room + Hall accoustics Reverberation Speech transfer measurment On-site machinery sound power Barrier performance measurement ✓



- \* 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
- \*\*\*\* For a minimal level of 70dB + 10dB margin SPL OA
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  \*\*\*\*\* Range in free sight. The range can be influenced by metal structures.