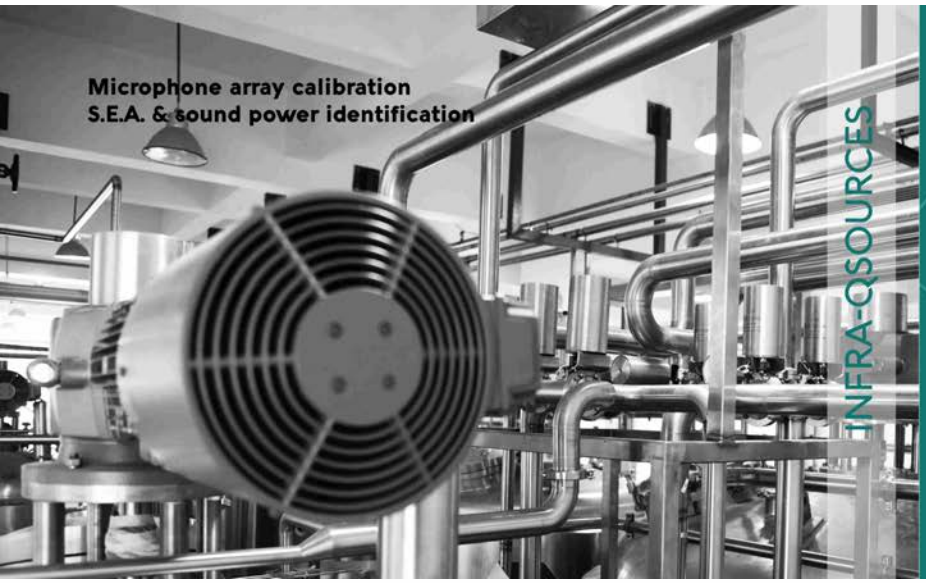
Qsources



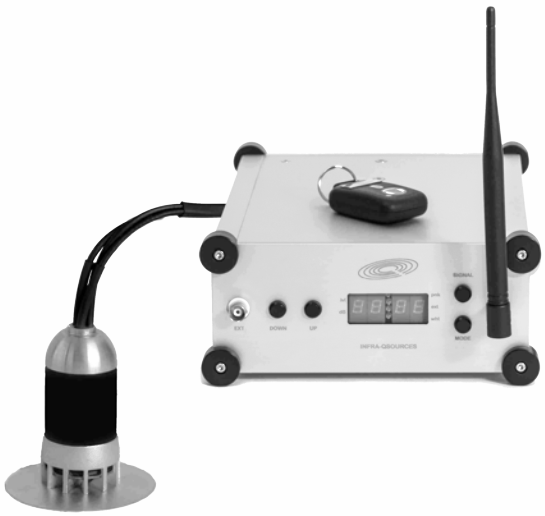
Qmir

MINIATURE SOUND POWER REFERENCE POINT SOURCE

Qmir is a very compact power reference monopole source with high acoustic impedance.
The small size of the Qsources Qmir make it especially suitable as a reference for large-count antenna measurements. The 20.5 mm. diameter allows a verification of the geometrical resolution down to +- 3cm. Next to this, the soundpower proportional signal allows a unique verification of the level identification through the antenna sensors, hardware and software processing.

Next to the standardised sound power reference applications, the compact size and frequency range make this source attractive for airborne power insertion in spaces or enclosed volumes for Statistical Energy Analysis (SEA). Measurement rooms and even small noise emission test-beds can be calibrated using Qmir. Test set-ups include regular verification of product testing or machinery testing, smaller an-echoic cabins and smaller reverberant cabins.
Qmir is also highly suitable for in-situ sound power identification in difficult or narrow spaces. The ISO 3747 procedure can easily be applied and the product even allows a more accurate identification with multiple positions on all the test-object faces or surfaces.

The set includes a dedicated Infra-Qsources QamR amplifier and is delivered with an individual certification according to ISO 6926.



PATENT PROTECTED
UNIQUE DRIVER

20.5 MM.
0.07 KG.

BROADBAND
200-16000 Hz

ISO 3747
ISO 6926

** Preliminary Specifications*

Qmir20032O

www.Qsources.be
Ketelwinning 38, 3293 Diest, Belgium - BTW/MWST/VAT 0478212968

Qsources

Qmir (preliminairy)

SPECIFICATIONS*	
Description	Point power reference source, hemi-omnidirectional
Weight	0.072 kg
Frequency range in third octave bands	200-16000 Hz (1/3 octaves)
Height	65mm
Diameter	20.5 mm
Omni directionality (ISO 16283)	Axial +-2 dB from 100-16000Hz, Tangential +-5 dB from 100-16000 Hz
Directivity Index (ISO 6929)	better than ISO 6926
Sound power level	80 dB+- 1 dB Lw, 2 minutes**
	74 dB+- 1 dB Lw, 10minutes**
Low frequency sound power at 50Hz	n.a.
Output level stability	better than ISO 6926
Typical Power requirement	Only operation with QamR power amplifier
Temperature Protection	√
Power overload Protection	√
Main Application area	Room calibration, Microphone array reference
Main Application examples	Laboratories and development sites
Number of Speakers	1
Q4 driver technology	
Seperate subwoofer needed	no
Mounting thread	no
Ambient temperature range	15 to 40 degrees celsius
Tripod Included	no
Soft transportation case included	tbd
Qualtiative, Robust Chassis material	√
Industry Standards	ISO 6926 with adapted freq. Range

POTENTIAL APPLICATION AREAS	
Aerospace	√
Marine	√
Military	√

MEASUREMENT TECHNIQUES	
On-site machinery sound power	√
Microphone array measurements	√

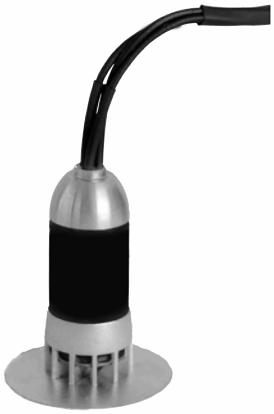
The Qsources Qmir is a unique sound power reference for hemisphere applications for several reasons;

•Despite its extremely small dimensions, this piston source allows broadband application from 200 Hz upwards to 16000 Hz at sound power level of 80 dB Lw for pink noise.

•It exceeds the ISO 6926 requirements in the 200-16000 Hz bands,

•It is incomparably lighter and smaller than any other sound power reference of similar output level on the market. Real time sound power proportional signal is available.

•The internal sensors measure the driver's activity and determine whether its within the controlled working range (temperature and amplitude).



These specifications may be adapted if necessary to improve the quality.
** When driven with QamR generated low crest-factor pink noise at 22 Celsius ambient temperature or lower.*

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