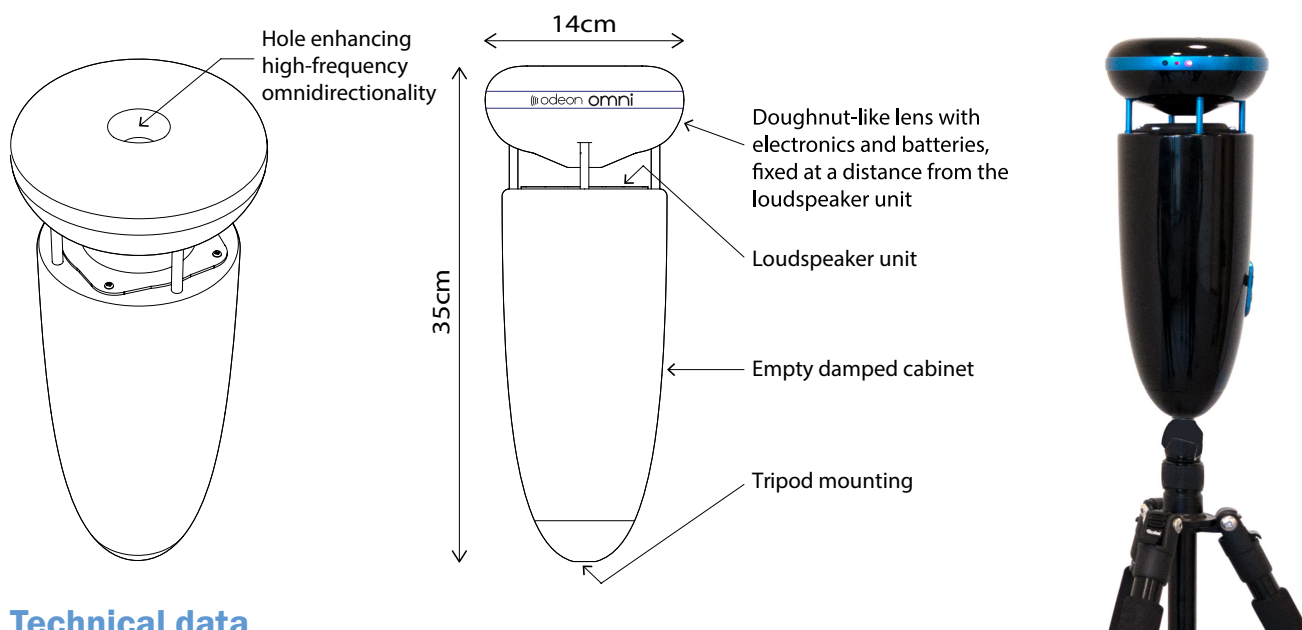# Specifications

A light-weight, wireless omni-directional sound source for room impulse response measurements. The source follows the ISO 3382 standard in terms of directivity and derivation of room acoustic parameters. It works on an AptX Bluetooth connection up to 30 m distance, which is sufficient for use in small to moderate venues (auditoria, small concert halls, classrooms, offices, restaurants, worship spaces etc.).

It has a built-in amplifier and lithium batteries that can be recharged directly on the device and provide about 1.5 hours of continuous measurement. Price: 4160 EUR / 31200 DKK.
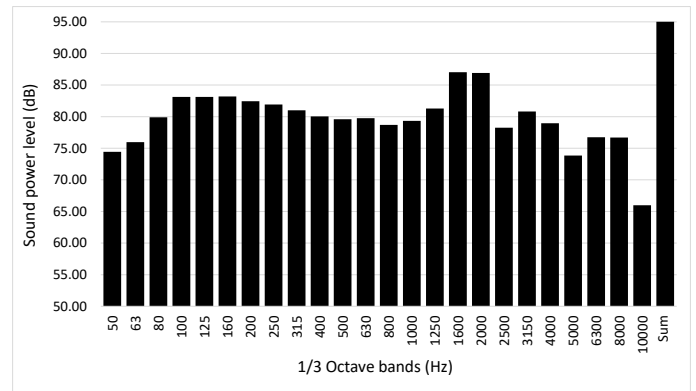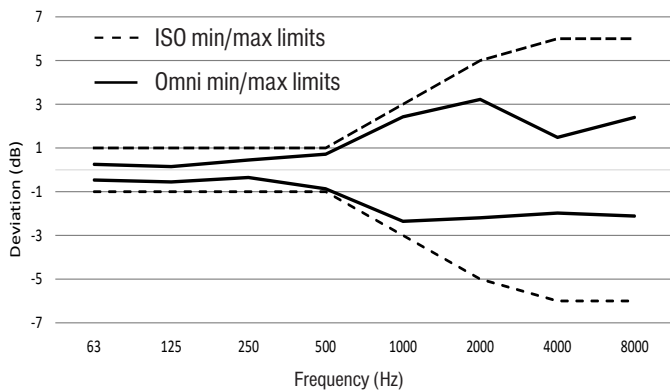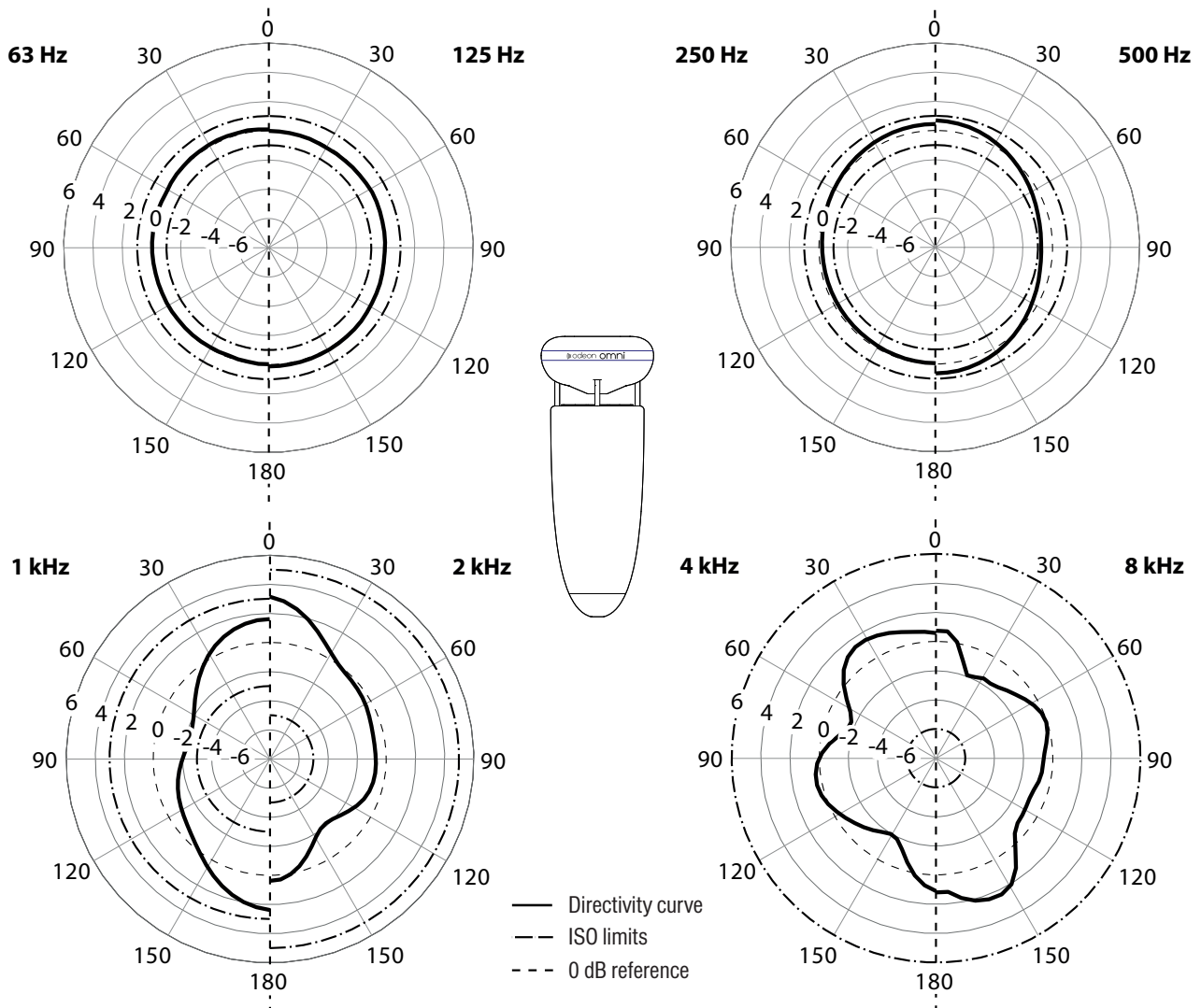

Hole enhancing high-frequency omnidirectionality

14cm

35cm

Doughnut-like lens with electronics and batteries, fixed at a distance from the loudspeaker unit

Loudspeaker unit

Empty damped cabinet

Tripod mounting

Technical data

Weight	1.5 Kg.	Wireless distance	Min 30 m without obstacles, up to 10 m with obstacles.
Frequency range(±6 dB)	63 - 8000 Hz Octave bands.	Cable connectivity	3.5 mm audio jack input.
Number of speaker drivers	1 full-range driver (3.5 inches).	Mounting	Sliding aluminium pin, glued on tripod.
ISO standards supported	ISO 3382, ISO 14257.	Temperature range	10° to 45° Celsius.
Sound power level (max)	96 dB, broadband.	Dimensions	35 cm length x 14 cm diametre.
Electric power	30 Watts rms, 4 Ohm.	Material	Gel-coated fiberglas, aluminium.
Capacity of batteries (pre-installed)	4 x 3000 mAh, 3.6 V.	Charger	Included (distributed with EU, UK or USA adaptors).
Battery life	1.5 hour continuous playback at max. level.	Tripod	Included.
Wireless connectivity	Bluetooth 5th gen. with AptX.*	Backpack	Included.

* Depends on the Bluetooth transmitter available on the laptop. Typically laptops with Windows 10 and 11 support Bluetooth 5th generation. Otherwise, use an extarnal USB Bluetooth adapter.

Directivity patterns between 63 Hz and 8 kHz for the vertical plane.

63 Hz · **125 Hz** · **250 Hz** · **500 Hz** · **1 kHz** · **2 kHz** · **4 kHz** · **8 kHz**

— Directivity curve
—·— ISO limits
----- 0 dB reference

- - - ISO min/max limits
—— Omni min/max limits

Deviation (dB) vs Frequency (Hz)

Sound power level (dB) vs 1/3 Octave bands (Hz)

Simplified directivity plot showing the largest deviation from the reference level (0 dB). The plot uses the min and max values from each polar plot in the figure above.

Max sound power of OdeonOmni per 1/3 octave. Last column: broadband sum.