

SONO Source 012

Spherical projector

A low-frequency, high-power transducer for transmit and receive applications →



SONO Sphere 012 is a horizontally omni-directional, reciprocal transducer useful in applications requiring low-frequency, high-power acoustic source references.

SONO Sphere 012 is made in hard ceramic making it a highly reliable transducer. It is ideal for transmitting applications. It is offered in a robust and durable bulkhead mounted housing.

Key features

- Low-frequency, high-power acoustic source
- Horizontally omni-directional
- Vertical directionality greater than 270°
- Long-term stability
- Durable and reliable construction

Applications

- Acoustic reference standard for test and evaluation
- Ideal for specialised UUV medium frequency underwater communications 8 kHz to 20 kHz
- Operations across the littoral

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Nominal resonant frequency	12.5 kHz
Receive sensitivity @ 14 kHz	-191 dB re 1V/mPa
Recommended receive frequency range	10 Hz – 15 kHz
Transmit sensitivity @ 13.5 kHz	+159 dB re 1µPa/V @ 1 m
Recommended transmit frequency range	8 – 20 kHz
Maximum applied voltage at resonance	530 Vrms
Low frequency capacitance (@ 1 kHz)	63 nF
Horizontal beam pattern	Omni-directional +/- 1.5 dB @ 5 kHz
Vertical beam pattern	>180° +/- 2 dB

Mechanical

Dimensions	Ø 248 mm x 336 mm
Weight in air / water	Approx. 20 kg / 6 kg
Maximum recommended operating depth	600 m
Operating temperature	-5° C to +35° C
Mounting	Bulkhead mounting