

GeoSpectrum Technologies Inc Customizing Detection

Spherical Transducers

HIGH-FREQUENCY SOUND SOURCE & RECEIVER

OVERVIEW

GeoSpectrum's spherical transducers provide an omnidirectional response and are available in diameters ranging from 6" to 1" and resonant frequencies of 12 kHz to 68 kHz. Spherical transducers are effective as both transmitters and receivers.

APPLICATIONS

Spherical transducers are suitable for a variety of applications including active/passive sonar, marine mammal detection, acoustic data transmission and subsea communications. They can be used with an M320 power amplifier which allows them to serve as a sound source, or with an M304 transceiver board if they are to serve as both a sound source and a receiver.

SPECIFICATIONS

Outer Diam. (cm)	Resonance Frequency [kHz]	TVR @ Resonance (dB re µPa/V @ 1 m)	OCV @ 1 kHz (dB re V/µPa)	Max Depth (m)	Weight (kg)	Capacitance (nF)
2.9	68	148	-198.5	2500	0.1	10.2
4.4	47	148	-195.0	2500	0.1	23.5
6.7	27	148	-190.0	2500	0.5	42.5
10.8	16.5	148	-186.5	2500	1.4	57.3
15.7	12	148	-185.0	2500	4.8	80
	Diam. (cm) 2.9 4.4 6.7 10.8	Diam. [cm] Frequency [kHz] 2.9 68 4.4 47 6.7 27 10.8 16.5	Diam. [cm] Frequency [kHz] (dB re µPa/V@1m) 2.9 68 148 4.4 47 148 6.7 27 148 10.8 16.5 148	Diam. [cm] Frequency [kHz] (dB re μPa/V@1 m) (dB re V/μPa) 2.9 68 148 -198.5 4.4 47 148 -195.0 6.7 27 148 -190.0 10.8 16.5 148 -186.5	Diam. [cm] Frequency [kHz] (dB re μPa/V@1 m) (dB re V/μPa) Depth (m) 2.9 68 148 -198.5 2500 4.4 47 148 -195.0 2500 6.7 27 148 -190.0 2500 10.8 16.5 148 -190.0 2500	Diam. [cm] Frequency [kHz] (dB re µPa/V @ 1 m) (dB re V/µPa) Depth (m) (kg) 2.9 68 148 -198.5 2500 0.1 4.4 47 148 -195.0 2500 0.1 6.7 27 148 -190.0 2500 0.5 10.8 16.5 148 -186.5 2500 1.4

GEOSPECTRUM TECHNOLOGIES INC

geospectrum.ca | sales@geospectrum.ca tel: +1 902.406.4111 | fax: +1 902.435.8987 | 10 Akerley Blvd, Unit 19 | Dartmouth, Nova Scotia | Canada | B3B 1J4