

GeoSpectrum Technologies Inc.

Customizing Detection

M8

The M8 is a high-frequency omni hydrophone and sound projector with a depth capability exceeding 3500 m. It can be purchased with or without a pre-amplifier, and can be packaged in various ways tailored to your application.





Receive Characteristics	
Acoustic sensitivity (1 kHz)	-200 dBV re 1µPa (unamplified)
Frequency range	1 Hz to 150 kHz, (± 5 dBV)
Capacitance (1 kHz)	$1.2 \text{ nF} \pm 15\%$
Transmit Characteristics	
Resonance frequency	138 to 158 kHz, depending on ceramic
TVR at resonance (dB re 1 μPa/V @ 1m)	147 dB re 1 μPa/V at 1 m
Bandwidth (-3 dB)	30 kHz
Horizontal Directivity	± 1 dB (typical) up to 100 kHz
Electroacoustic efficiency	> 80% at resonance
Drive voltage	> 250 V
Mechanical Characteristics	
Size: diameter, length (one package type)	22 mm, 110 mm
Operating and survival depths	> 3500 m
Operating and storage temperatures	-40 to +70°C
Electrical resistance between leads	$> 1G\Omega$ @ 20 °C and 50% humidity
Fluid compatibility	Water, and Isopar (depends on leads)