



## M8E-51

The M8E is a wide-band omni-directional hydrophone designed for marine observation. It comes with a pre-amplified output of 0 to 35 dB (selectable on order) with current or voltage signalling.



### Electrical Characteristics

Voltage Sensitivity (w/o pre-amp)	$-200.0 \pm 1.5$ dBV re 1 $\mu$ Pa @ 20°C
With pre-amp	$-165.0 \pm 1.5$ dBV re 1 $\mu$ Pa @ 20°C
Capacitance	1.4 nF $\pm 20\%$ @ 20°C

### Mechanical Characteristics

Size	3.43" Long x 0.86" OD
Operating Depth	> 200 m (M8P – 6000m, M8Q – 3500m)
Survival Depth	> 1500 m
Electrical connector	SubConn MCOM8-M
Storage and Operating Temperatures	-40 to +70°C
Acceleration Sensitivity	<1.5 mbar/g, in air, any axis
Lowest Resonance Frequency	170 kHz
Labelling	Calibration parameters, serial number, date

### Stability

Electrical Insulation Between Leads	>1 G $\Omega$ @ 20°C and 50% humidity
Variation of Sensitivity	<0.3 dBV 1Hz to 2kHz <0.1 dBV over depth range
UV and Isopar Resistance	Excellent

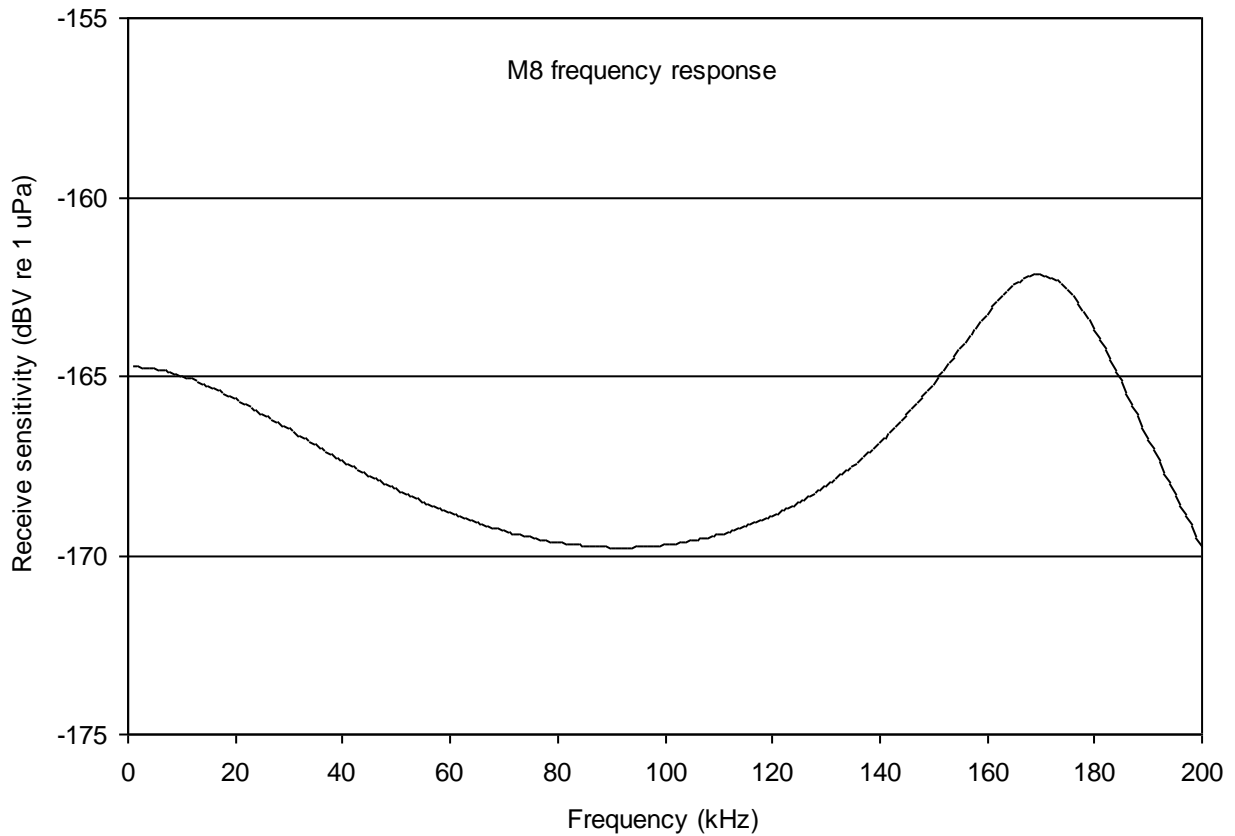


Figure 1 M8E Frequency Response

Voltage Pre-amp:

- Input voltage 6.8VDC nominal, 4.5V to 30V operational
- Gain = 35 dB Nominal, unless otherwise specified.
- Band pass: 5 Hz HPF, no LPF installed
- IRN: <math>30\text{nV}/\sqrt{\text{Hz}}</math> @10 Hz, <math>6\text{nV}/\sqrt{\text{Hz}}</math> @1 kHz
- Current draw 1.3 mA typical at 6.8 VDC, 4.2mA typical in current signalling mode