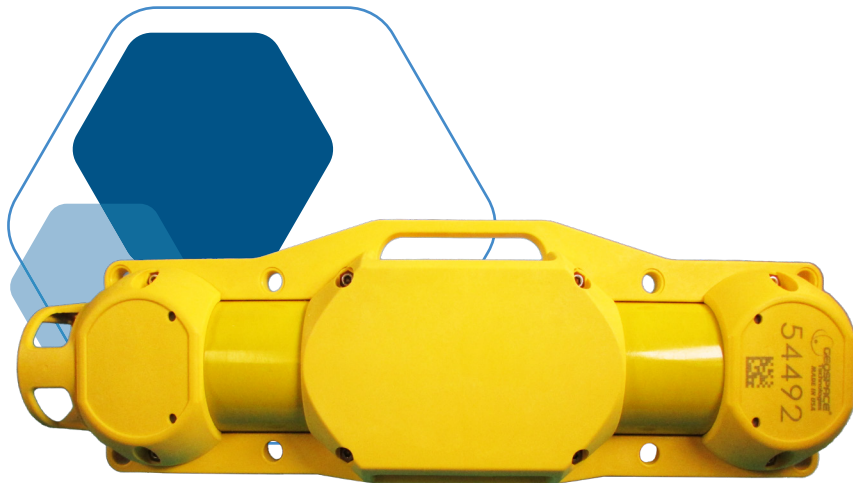


## SLIM PROFILE SHALLOW WATER DATA RECORDER

### 70 DAYS OF CONTINUOUS RECORDING



#### PRODUCT DESCRIPTION

The Mariner is designed for extended duration seabed ocean bottom seismic data acquisition. Nodes are ideally deployed at shallow depths down to 750 meters with continuous recording for up to 70 days.

#### FEATURE HIGHLIGHTS

- Wireless Charge and Data Download
- Continuous cable-free 4C autonomous recording
- Maximum operating depth: 750 meters
- Battery life: 70 days
- Built-in full resolution test generator
- Solid-state flash memory: Up to 32 GB per channel
- Internal heading sensor



# GS-ONE OMNI

## Geophone

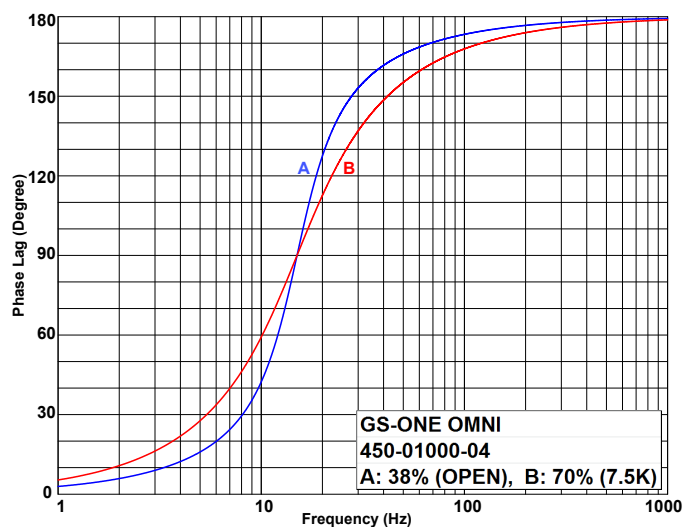
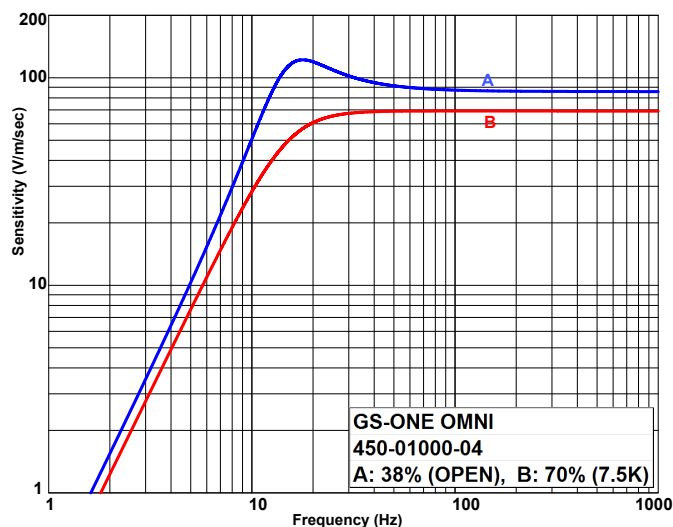
### PHYSICAL SPECIFICATIONS

Moving Mass	13.2 g	0.466 oz
Maximum coil excursion p-p	4.06 mm	0.16 in.
Minimum coil excursion p-p	1.02 mm	0.04 in.
Diameter	30.5 mm	1.2 in.
Height	40.7 mm	1.6 in.
Weight	130 g	4.60 oz
Operating and Storage Temperature Range	-40°C to +100°C	-40°F to +212°F

### ELECTRICAL SPECIFICATIONS

All parameters are specified with 7.5k $\Omega$  load at 25°C in all tilt positions unless otherwise stated.

Frequency	15 Hz
Spurious Frequency	>160 Hz
Distortion at Horizontal	0.05% Typical
Resistance with 7.5 k $\Omega$ load	1450 $\Omega$
Sensitivity at 70% Damping	69.2 V/m/s (1.75 V/in/s)
Damping	70%
Distortion at all tilt angles	<0.2% measured at 15 Hz with 0.2 in/s p-p



# MP 18 BH

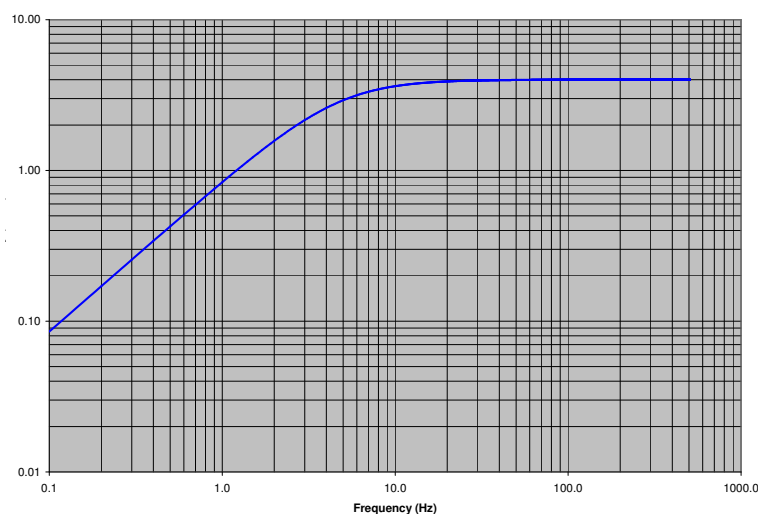
## Hydrophone

### ELECTRICAL SPECIFICATIONS

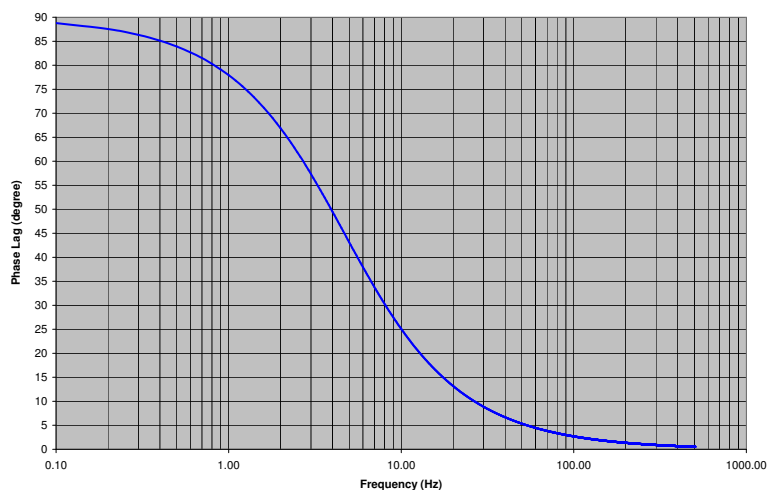
Nominal Capacitance (at 25°C 1atm)	16.0 nanofarads
Voltage Sensitivity <sup>2</sup>	4V/Bar
Sensitivity (dBv ref 1μPa @ 25°C)	208
Frequency Response (into 2 MΩ load)	5-1000 Hz (typical)

1. Safe to be used slightly below 0°C as long as water is not frozen. Do not let hydrophone be frozen in ice, as this will cause irreversible damage to the crystals. 2. Voltage Sensitivity is specified when connected to OBX.

MP18 BH 1000ft 4 V/bar



MP18 BH 1000ft 4 V/bar



## MECHANICAL SPECIFICATIONS

	METRIC	US
Length	578 mm	22.75 in.
Width	178 mm	7.0 in.
Height	102 mm	4.0 in.
Weight in Air	7.85 kg	17.3 lbs.
Weight in Seawater	2.39 kg	5.26 lbs.
Maximum Operating Pressure	7.5 MPa/75 Bar	1095 psi
Maximum Operating Depth	750 M	2460 ft.
Operating Temperature Range	-5°C to +50°C	+23°F to +122°F

## ELECTRICAL SPECIFICATIONS

Digitization	24-bit Delta-Sigma
Sample Interval	0.25, 0.5, 1, 2, 4 ms
Pre-amplifier Gains	0, 6, 12, 18, 24, 30, 36 dB
Maximum Input Signal	1.8 Vrms
Equivalent Input noise (@2ms sample interval)	0.17 $\mu$ Vrms
Gain Accuracy	Better than 1%
Digitized 4C Recording Station:	4 Channel, 24 Bit A/D Digitizer 3C Orthogonal oriented GS-One OMNI 10 Hz Geophones 1 MP-18BH-2500 Hydrophone
Anti-alias Filter	83% Nyquist
Instantaneous Dynamic Range	124dB @ 2 ms sample interval
THD	<0.2%
Distance Between Digitizer & Farthest Sensor	<36 cm
Distance Between All Sensors	<4 cm
Flash Memory	16 GB or 32 GB per channel
Frequency Response	1 Hz – 1650 Hz @ 1/4 ms sample interval
Battery Module	70 days operation
Internal Heading Sensor	+/- 5°

SOLUTIONS FOR A SMARTER FUTURE

Specifications subject to change at sole discretion of Geospace Technologies.