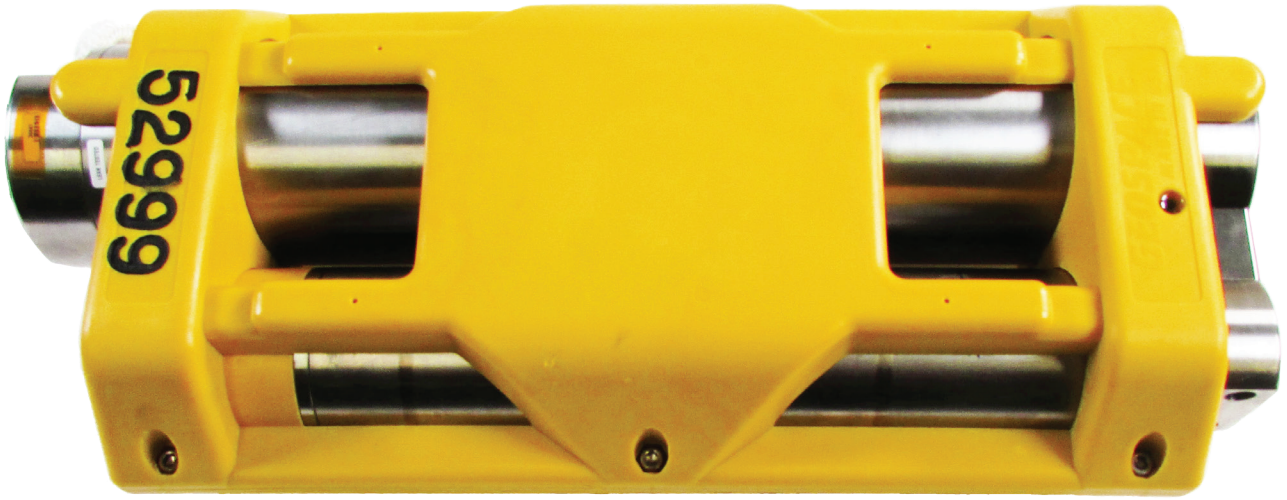
OBX Ocean Bottom Recorder

OBX-155



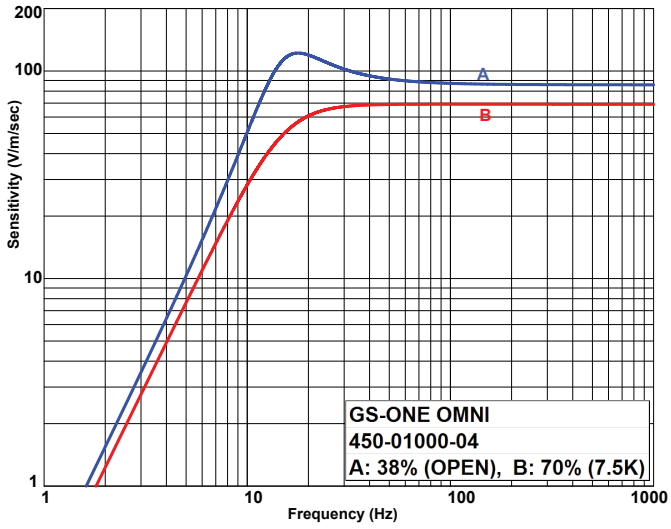
- Continuous cable-free 4C autonomous recording
- Battery module: 155 days operation
- Built-in full resolution test generator
- Solid-state flash memory: 32 GB per channel
- CSAC clock

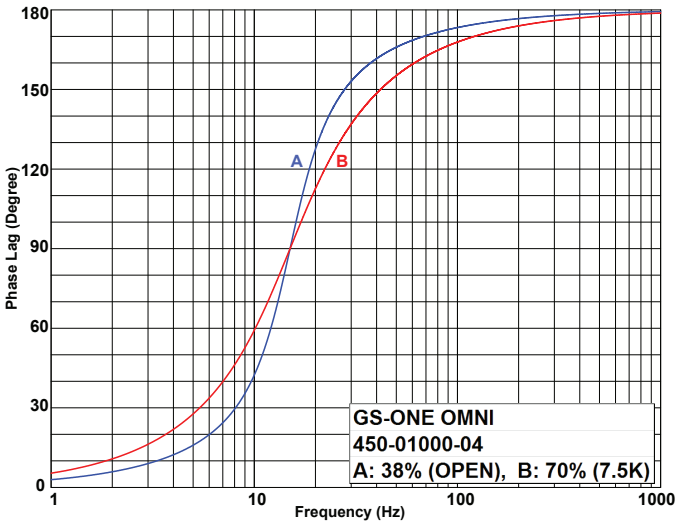
GEOSPACE® Technologies

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 7.5 kΩ load at 25°C in all tilt positions unless otherwise stated.	
Frequency	15 Hz
Spurious Frequency	>160 Hz
Distortion at Horizontal	0.05% Typical
Coil Resistance	1450 Ω
Open-Circuit Sensitivity	69.2 V/m/s (1.75 V/i/s)
Sensitivity at 70% Damping	69.2 V/m/s (1.75 V/i/s)
Open-Circuit Damping	70%
Distortion at all tilt angles	<0.2% measured at 15 Hz with 0.2 in/s p-p





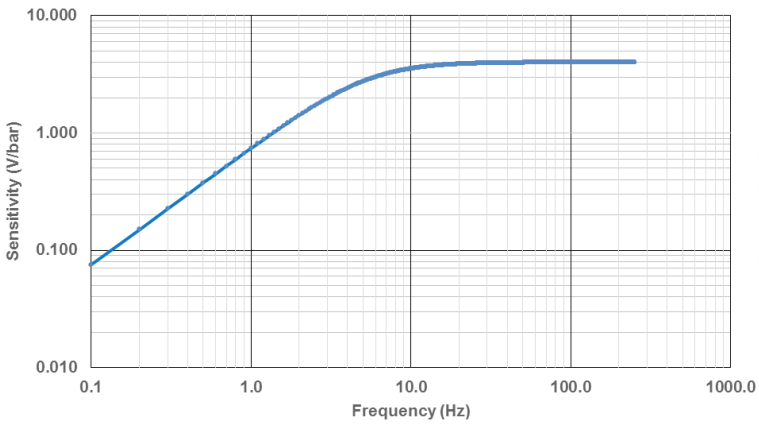
US Patent 8,098,546

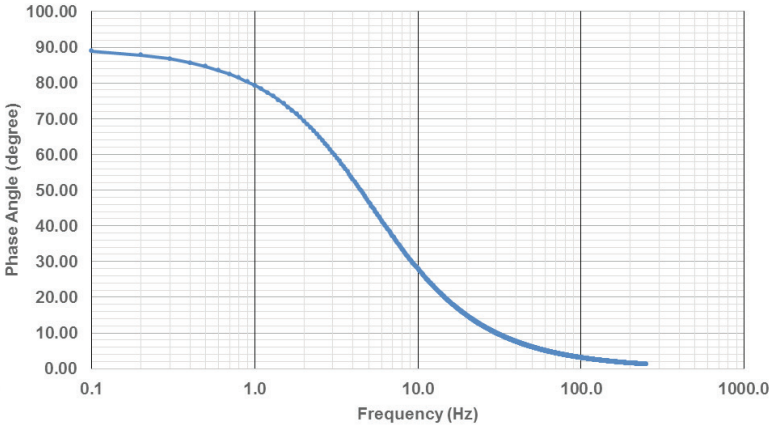
HYDROPHONE Deepender™ 5000-X

PHYSICAL SPECIFICATIONS	
Maximum Operating Pressure	34.5 MPa (5,000 psi)
Maximum Working Depth	3450 m (11,319 ft.)
Operating Temperature Range[1]	–10 to +75°C (+14 to 167°F)
Outside Diameter	50.8 mm (2.0 in.)
Length	38.1 mm (1.5 in.)

ELECTRICAL SPECIFICATIONS	
Nominal Capacitance (at 25°C 1atm)	20.0 nanofarads
Voltage Sensitivity[2]	4.0 µV/µBar
Sensitivity (dBv ref 1µPa @ 25°C)	–181.9 dB re 1nC/µPa
Frequency Response (into 2 MΩ load)	3 –15,000 Hz

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.





OBX-155

MECHANICAL SPECIFICATIONS (HOUSING)	*Metric*	*US*
Length	500 mm	19.7 in.
Width	215 mm	8.48 in.
Height	111 mm	4.38 in.
Weight in Air	18.2 kg	40.2 lbs.
Weight in Seawater	10 kg	22.1 lbs.
Maximum Operating Pressure	34.5 MPa/345 Bar	5,000 psi
Maximum Operating Depth	3,450 M	11,316 ft.
Operating Temperature Range	–5°C to +35°C	+23°F to +95°F
Storage Temperature Range	–10°C to +40°C	+14°F to +104°F

ELECTRICAL SPECIFICATIONS	
Digitized 4C Recording Station:	4 Channel, 24 Bit A/D Digitizer 3C Orthogonal oriented GS-One OMNI 15 Hz Geophones 1 DEEPENDER Hydrophone
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 µVrms
Gain Accuracy	Better than 1%
Anti-alias Filter	83% Nyquist
Instantaneous Dynamic Range	124dB @ 2 ms sample interval
THD	<0.2%
Distance Between Digitizer & Farthest Sensor	<18 cm
Distance Between All Sensors	<13 cm
Flash Memory	32 GB per channel
Frequency Response	1 Hz – 1650 Hz @ ¼ ms sample interval
Battery Module	155 days operation

Specifications subject to change at sole discretion of Geospace Technologies.

GEOSPACE® Technologies

7007 Pinemont Drive • Houston, Texas 77040 USA
www.geospace.com
Tel: 713-986-4444 • Fax: 713-986-4445

GEOSPACE ENGINEERING RESOURCES INTERNATIONAL, INC.

Geospace Technologies, Canada
2735 - 37th Avenue N.E.
Calgary, Alberta,
T1Y 5R8 Canada
403 250-9600

Geospace Technologies, China
Room 700, 7th Floor
Lido Office Tower, Lido Place
Jichang Road, Jiang Tai Road
Beijing, 100004, P.R.China
011 (86) 10 6437 8768

Geospace Technologies
Sucursal Sudamericana
Carrera 127-22 G 28 Int. 30
Agrupación Industrial La Esperanza
Bogotá, Colombia
011-57-1-742-7414

Geospace Technologies, Eurasia
Kirovogradskaya, 36
Ufa, Baskortostan
Russia 450001
011 (7) 3472 25 39 73

Geospace UK
F3 Braningham Business Park,
Enterprise Way, Luton
Bedfordshire LU3 4BU, England
011 44 (0) 7775 688 467

592-17750-01 Rev. A