

GEOSPACE PRM SYSTEMS

PERMANENT RESERVOIR MONITORING



- **Engineered Solutions**
- **Proven Data Quality**
- **Proven Large-Scale Installations**
- **Proven Results**

Specifications

GS-ONE OMNI Specifications

Specifications with 12K shunt, 20K load @ 25°C

Resonance Frequency	15 Hz, +10%, -5%
Spurious Frequency	> 160 Hz
Distortion	<0.2% @ 15 Hz with 0.2 in/s p-p
Sensitivity	1.75 V/in/s (69.2 V/m/s) +5%, -10%
Damping	70% ±10%
Operating Angle	0° to 180° (omni-directional)
DC Resistance	1450 Ω ±5%

DEEPENDER 5000-X Specifications

Specifications @ 25°C

Sensitivity (Free Field Voltage)	4.0 μV/μbar
Sensitivity (Free Field Charge)	-181.9 ±2.5 dB re 1nC/μPa
Sensitivity versus Depth	<1.5 dB from 0-11,480 ft. (0-3,500 m)
Frequency Response	3 Hz to 15 KHz
Capacitance	20.0 nF ±35%
Maximum Operating Pressure	5000 psi (34.5 MPa)
Operating Temperature Range	0°C to 70°C

Module Specifications

Digitization	24-bit Delta-Sigma
Sample Rate	2, 4 ms
Pre-amplifier Gains	0, 6, 12, 18, 24, 30, 36 dB
Maximum Input Signal for Geophone	26 mm/sec
Maximum Input Signal for Hydrophone	450 millibar
Equivalent Input Noise (@ 2ms sampling rate)	0.043 μbar rms, (1.77 μmm/sec rms)
Gain Accuracy	Better than 1%
Anti-alias filter	83% Nyquist
Instantaneous Dynamic Range	124 dB @2ms sample interval
Crossfeed Isolation	> 90 dB
THD	<0.2%
Geophone Type	GS-ONE OMNI Geophone
Hydrophone Type	DEEPENDER 5000-X
System Timing Accuracy	Significantly better than 1 part in 5000 relative to first data sample

Specifications subject to change without notice.



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