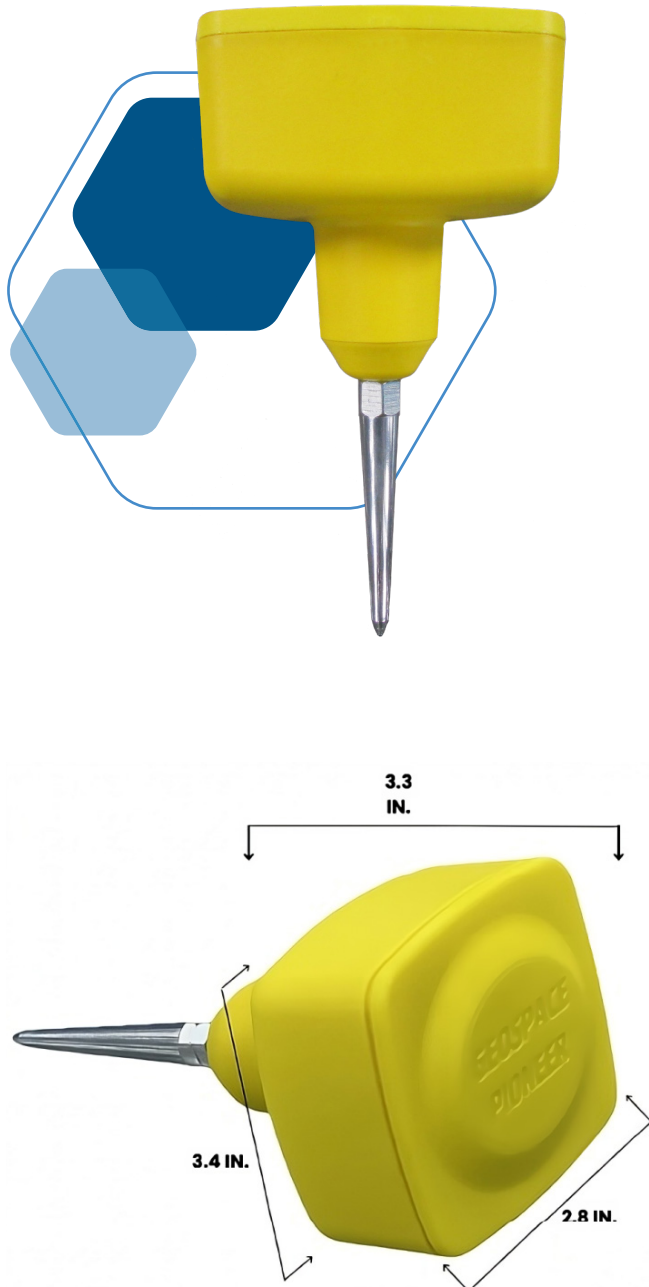


SINGLE CHANNEL SEISMIC DATA RECORDER

SMALL, LIGHTWEIGHT AUTONOMOUS DATA RECORDER



PRODUCT DESCRIPTION

The Pioneer™ is a small, lightweight, single-component, autonomous land wireless seismic data acquisition solution. One GS-5 vertical geophone (5 Hz) internal geophone, battery, 24-bit digitizer, GPS receiver are enclosed in its sealed case. Faster and more efficient operations can be achieved with the use of the Pioneer by eliminating the process of engaging connectors for power and data transfer.

FEATURE HIGHLIGHTS

- Less than 0.5 kg (1 lb.)
- Wireless data download and charging
- Continuous cable-free autonomous recording
- 24-bit resolution and 122 dB instantaneous dynamic range
- GS-5 vertical geophone (5 Hz)
- Battery life: 50 days @ 24 hrs/day operation
- Solid-state flash memory: 16 or 32 GB

MECHANICAL SPECIFICATIONS

Length x Width	8.8 x 8.2 cm	3.48 x 3.23 in.
Height (without spike)	9.4 cm	3.7 in.
Weight (with spike)	.45 kg	1 lb.
Operating Temperature Range	-40°C to +60°C	-40°F to +140°F

ELECTRICAL SPECIFICATIONS

Digitized 1C Recording Station:	1 Channel, 24-bit A/D Digitizer GS-5 Vertical Geophone	
Digitization	24-bit Delta-Sigma	
Sample Interval	0.5, 1, 2, 4 ms	
Pre-amplifier Gains	0, 6, 12, 18, 24, 30, 36dB	
Maximum Input Signal	1.77 Vrms	
Equivalent Input Noise (@2ms sample interval)	0.28 μ Vrms	
Gain Accuracy	Better than 1%	
Anti-alias Filter	83% Nyquist	
Instantaneous Dynamic Range	122 dB @2ms sample interval	
THD (Geophone)	< 0.1%	
Flash Memory	16 or 32 GB per channel	
Frequency Response	1 Hz – 830 Hz @ ½ ms sample interval	
Battery Module	50 days operation	
GS-5 Geophone Sensitivity	2.1 V/in./s +/-5%	
Geophone Frequency	5 Hz	
Geophone Spurious Frequency	>160 Hz	

SOLUTIONS FOR A SMARTER FUTURE

Specifications subject to change at sole discretion of Geospace Technologies.