

PIONEER

SEISMIC DATA RECORDER



Small, Lightweight Autonomous Data Recorder

- 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



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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	

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