



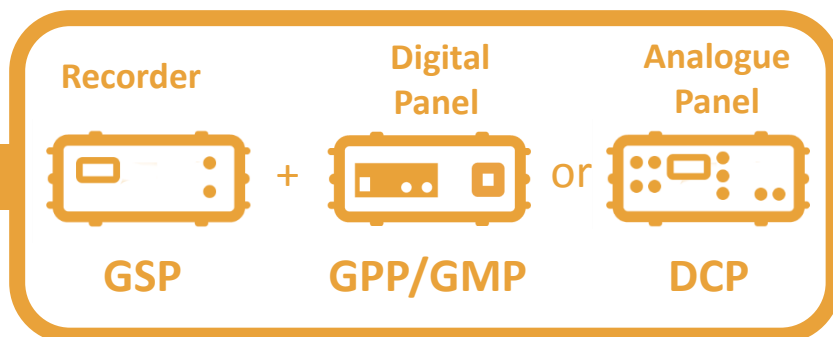
Main Features

- Ideal for **VSP & Microseismic** surveys.
- Up to 62 satellites.
- Slim 1 11/16" (43mm) Outside Diameter Tool.
- Unique Active Cooling System for continuous operation at 385°F (195°C) .
- 20,000psi (1400 bar) pressure rating.
- Standard 7 conductor wireline with GO7 connection.
- Real time data transmission.
- Extra sensitive QUAD 3 component sensor.
- 24-bit delta sigma convertors.
- Up to >600' (200m) between satellites.
- Operates with all standard ASL surface panels.
- Gapless recording for passive monitoring surveys.
- Tractor deployment capability.

Functionality

- The GeochainSlim™ is the next development of the field proven VSP and hydraulic fracture monitoring Geochain System. This system has been designed for use in open and cased holes with all locking arms opening simultaneously to reduce survey time. A max bandwidth of 1600Hz, very low electronic noise levels and slim size make the system ideal for hydraulic fracture surveys.
- The established extra high sensitivity Quad geophone sensor pack is now available as a standard configuration. The system also benefits from the new gapless recording functionality which is ideal for the continuous requirements of passive monitoring.

SURFACE PANELS



LEADERS IN BOREHOLE SEISMIC TECHNOLOGY

GSR-1 Satellite Specifications

Length	44" (1135mm)
Diameter	1 11/16" (43mm)
Weight	19.5lbs (8.85kg)
Max locking range	7" (178mm) Standard or 13" (330mm) with long arm
Max locking force	300 lbs (Standard Arm)
Temperature	400°F (204°C) Analogue / 385°F (195°C) Digital
Pressure	20,000psi (1400 bar)
Sensors	3 Component Fixed – SMC 2400 15Hz Omni- Quad/Dual
Well Deviation	0°-95°
Control Panels	GPP or GMP & GSP-1 (Digital) DCP-2 & GSP-1 (Analogue)



Downhole Specifications

Max. No. of Satellites	62		
Telemetry	<i>Sample interval</i>	<i>Bandwidth Hz</i>	<i>GSR's (DFU)</i>
	1/4ms	1600	8 (15)
	1/2ms	800	16 (30)
	1ms	400	32 (60)
	1.5ms	266	48 (80)
Dynamic Range	>112dB @ 0dB pre-gain (minimum)		
A/D convertor	24 bit Delta-Sigma		
Distortion	<0.02%		
DC offset	Self-calibrating		
Wireline	7 Conductor Heptacable		

Surface Specifications

Recording panel	GPP and GSP-1 (Digital) DCP-2 and GSP-1 (Analogue)
Software	ACQ Acquisition Suite & Copy of VSProwess© Processing Software
Cable equalisation	Fully automatic using internal DSP chip
Airgun firing pulse	60 V, 30ms
Test system	Fully automatic with comprehensive report generation
PC Interface	USB
Power Requirements	100/230 V AC, 47-63 Hz universal input, 30 watts
Operating Temp	32-104°F (0-40°C)
Enclosure	Standard 19" rack mounting