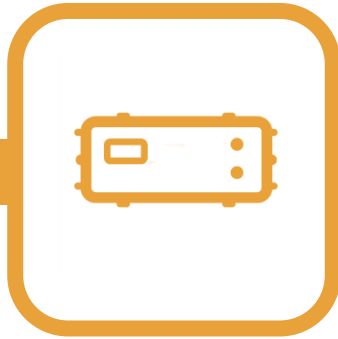


**GSP – Geochain System Panel**



**Main Features**

- Surface Recorder and PC interface.
- Up to 16 analogue channels.
- 24 bit delta sigma convertors.
- Built in firing circuit.
- Optional GPS time stamp.
- Full instrument tests function.
- USB interface.
- Use standard PC running ACQ software.

**Functionality**

- This surface recording panel can have a maximum of sixteen analogue seismic channels along with the standard digital input section. The panel can therefore be used with any analogue borehole seismic tools or with our latest Geochain™ digital string.
- **Firing Circuit (FC)** allows GSP to trigger a single air gun without any additional equipment.
- **GSPIO** module includes: external source control interface, power control circuitry and controls the FC.
- **Dual seismic interface (DSI)** allows between 2-16 Analogue channels.
- **CPU2** offers both a GPS time stamp and depth encoded interface.
- **Test signal generator (TSG)** able to generate either precision sine wave signals or single sample impulses.

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*GSP-1 General*

|                                |  |
|--------------------------------|--|
| <b>Airgun firing pulse:</b>    | Isolated 60V, 30ms pulse                             |
| <b>Source control outputs:</b> | 4, opto-isolated                                     |
| <b>Timebreak inputs:</b>       | 3, opto-isolated                                     |
| <b>Remote start inputs:</b>    | 1, opto-isolated                                     |
| <b>Test system:</b>            | Fully automatic with comprehensive report generation |
| <b>PC Interface:</b>           | USB  |
| <b>Power requirements:</b>     | 95-260V ac. 50/60 Hz universal input, 50 watts       |
| <b>Enclosure:</b>              | Standard 19" rack mounting                           |

*GSP-1 Digital section*

|                            |   |
|----------------------------|---|
| <b>Interface:</b>          | RS422 (As 2065 DIF module option)       |
| <b>Cable equalisation:</b> | Fully automatic using internal DSP chip |
| <b>Format:</b>             | Software configured to match system     |

*GSP-1 Analogue section*

|                            |  |
|----------------------------|--|
| <b>No. of channels:</b>    | 2-16   |
| <b>Sample intervals:</b>   | 0.25, 0.5, 1.0, 1.25, 2.0, 2.5, 4.0ms            |
| <b>A/D convertor:</b>      | 24 bit Delta-Sigma                               |
| <b>Dynamic Range:</b>      | <112dB @ 0dB pre-gain (minimum)                  |
| <b>Distortion:</b>         | <0.01% (0.003% typical) @31.25 Hz, 15V pp signal |
| <b>Noise:</b>              | <10uV rms @ 1ms, 0dB pre-gain                    |
| <b>Input:</b>              | Differential, 20V pp max                         |
| <b>Inter-channel skew:</b> | Zero   |
| <b>Timing Accuracy:</b>    | 10ppm  |

**Control Panel for**

