

## SL05 24 BIT ULTRA LOW POWER DATALOGGER



The SL05 is a rugged and compact seismic datalogger system up to 3 channel. 4.5Hz sensors can be embedded.

It is capable of recording only events in a 4Mbytes SRAM memory.

The strong point of this instrument is the power consumption with only 1W of requirement make it a instrument especially suitable for remote installations.

### Overview

The SL05 is a ultra low power datalogger for seismic signal. This product includes only 24 bit digitizers. They can equipped with sensors and embeds a CPU with a RISC processor with a proprietary software and with a very low power consumption.

To manage the unit it is sufficient a simple VT100 Terminal Emulator.

All the instruments are equipped with a GPS receiver for the precise synchronization with the UTC time.

The SL05 instrument with 3 external channel and with low noise feature is a good choice for signal digitising of broad-band seismometers and velocimeters with an high generator constant such as the Mark Products L4C and the Geospace GS-1. The SL04 with a signal/noise ratio of about 124dB at 100 SPS allow the user to digitise signals with excellent results.

- VERY LOW POWER CONSUMPTION: 1 Watt
- 4 MBYTES SRAM
- EMBEDDED SENSORS
- Iridium Modem Compatible
- WIDE RANGE POWER INPUT: 10 to 16Vdc
- VT100 terminal compatibile mode
- GSE format output

### Technical features

Analogue channels:	3
Band-pass:	standard DC to 10Hz (customizable)
A/D converter:	24 bit sigma-delta
Damping:	0.7 (geophones internally damped)
Dynamic range:	124dB at 100 SPS
Clock:	10ppm stability
Precision:	5ppm at 20°C
Sincronization:	with GPS receiver included
GPS Antenna:	Amplified antenna with 10mt of coaxial cable and BNC connector
Sample frequency:	10, 20, 25, 50, 100, 200 SPS
Power supply:	10-16Vdc - 1W
Housing:	rugged aluminum case, splash proof
Oper. temperature:	-20/+55 °C
I/O:	1 RS232 comm port, 1 RS232 GPS output port
Weight:	2.53 Kg (with sensors)
CPU:	Atmel AVR RISC processor
Mass Memory:	4 Mbytes of SRAM
Internal Sensors:	4.5Hz natural period velocimeters or accelerometers
External sensors:	wide range of sensors input, to be specified at order

### Applications

- Earthquake monitoring in short range seismic network
- Personal Seismograph
- Remote Seismic Station