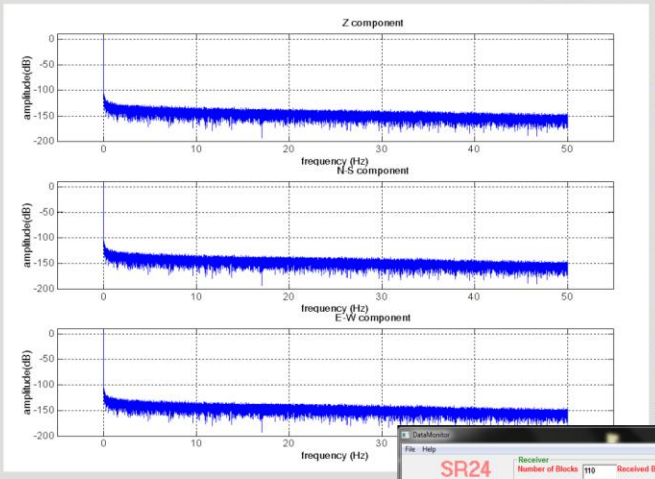
SR24-SM5: Low Power, 24bit Telemetry Digitizer with Seiscomp plugin

- 24 bit digitizer
- Low power consumption
- Removable Compact Flash
- GPS time accuracy
- 1-500 samples per second
- 3 input channels
- Continuous Recording Mode
- 26 days data buffer
- Rugged Waterproof Housing
- Operation Range: -20 +70°C
- Seiscomp/SEEDlink Plugin
- LDC screen
- Serial Data Port
- Ethernet Data Port

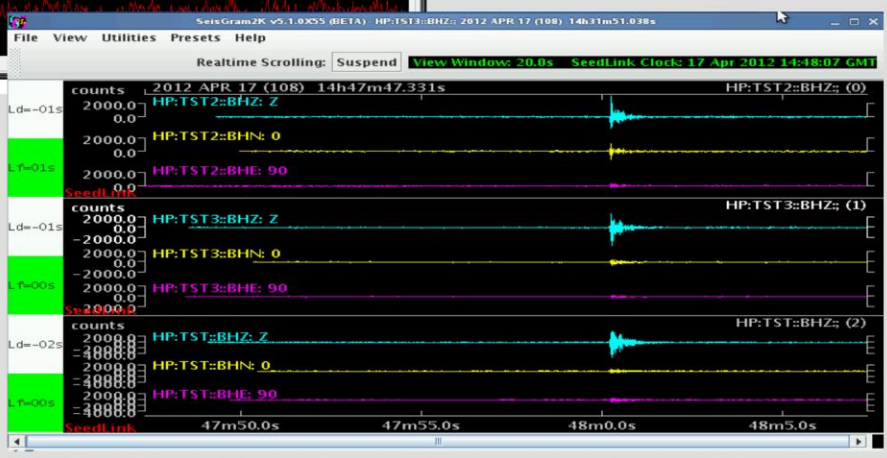


The SR24-SM5 has 3 input channels, and a modificated input for matching with the SM1500 and SM550 strong motion sensors. Any other type of single-ended sensor with +/-2.5V range can be connected to the digitizer.
The digitizer is based on a powerful, wide dynamic range delta-sigma analog-to-digital converter, with very low noise characteristics and excellent power supply rejection. The sampling rate can be set to 40, 50, 60, 100, 125 150, 200, 250, 300, 400 and 500 samples per second. Optional, sampling rates of 1, 2, 5, 10, 20, 25 samples per second can be supported.
A Compact Flash type storage unit acts as inbuilt data buffer. Capacity of 2 GB is enough to store approximately 26 days data of 3 channels @ 100 sps. This means that in case of telecommunication link absence, data can be retrieved within 26 days .

The power consumption is extremely low, allowing the digitizer to operate powered from a 25W solar panel and a 12V/18Ah lead-acid battery.
Data can be acquired to the remote Seiscomp/SEEDlink PC using the instrument's ethernet port. The user has just to plug the ethernet cable to its telemetry modem.

Features:

-24-bit, 3ch digitizer
-Real time datastream
-SEEDLink/Seiscomp ready
-Ultra Low power
-26 days data buffer
-10T/100Tx ethernet



The LCD display, displays the State-of-Health, time and date and other information related to the instrument's operation.
The digitizer is intended for installation in harsh environments and is supplied with a portable waterproof plastic case, manufactured of HPX high performance resin, with easy press & pull latches and durable soft-grip handle with easy access to all user features.

Instrument Characteristics

GENERAL	
Number of channels A/D converter CMRR Input resistance Sampling Rate	3 Sigma-Delta, 312KHz base rate, 24bits resolution Better than -100dB 500kOhms differential 1 - 500 samples per second
Power	9-18Vdc ~1.5W (125mA@12Vdc)
RMS noise	130dB @ 100sps 140db@50sps
Input signal	+/-2.5Vpp unipolar.
DATA RECORDING	
Data buffer	Compact flash card, 2Gbytes capacity. (Optional more than 2Gbytes)
Data type	Raw binary data.
Data stream	Over TCP/IP in real time
Additional information	Position, Voltage, Time, Station ID
Recording mode	Continuous
TIME BASE	
Type Accuracy	12 channels GPS receiver Time: +/-1usec to UTC time pulse, +/-5 meters to position
COMMUNICATION	
Telemetry Connectivity	10T/100XT base Ethernet. Seiscomp/SEEDlink, over TCP/IP
PHYSICAL	
Size	300mm x 250mm x 120mm
Weight	3.2kgr
ENVIRONMENT	
Temperature range Humidity	-20 to +70 °C 100%, IP67 enclosure