

SUMMIT II Compact HS

The ultra high resolution seismic Data Acquisition System !

The SUMMIT II Compact HS is the most productive and robust seismic system for high speed and ultra high resolution data acquisition. The seismograph works as a stand alone system or several boxes can be linked together with the 'Snap-on' line cable to comprise a multi- channel seismic acquisition system.

Specialised for applications requiring high sampling rate data acquisition

- Highest productivity due to its sophisticated system design
- Extremely robust, lightweight metal casing
- Supreme service via rapid reaction support hotline



Technical Specifications

Sampling Rate	125 Hz up to 192 KHz
Record Length	0.5 K samples, ..., 120 K samples
Preamp Gain	0 dB, 20 dB or 40 dB
A/D Converter	24 bit delta sigma technology
Maximum Input Signal	2.0 Volt RMS 5.6 Volt peak to peak
Input Impedance	20 kOhm
Instantaneous Dynamic Range	≥ 120 dB @ 2 ms sampling interval
Equivalent Input Noise	Less than 0.2 µV RMS @ 2 ms sampling interval and 40 dB preamp gain
Crosstalk	≥ 112 dB (between channels)
Total Harmonic Distortion	≤ 0.0008 %
Common Mode Rejection Ratio	≥ 100 dB
Gain Accuracy	Typical 1 % (between all channels)
Time Accuracy	Typical 5 ppm (between all channels)
Power Supply	+ 9 - 18 VDC @ 0.2 W / channel
Dimensions	20.0 x 15.0 x 29.0 cm
Weight	4.9 kg

Analogue Low-Cut Filter	1 Hz 6 dB/octave
Digital Anti-Alias Filter	0.8 x Nyquist
Rejection at Nyquist Frequencies	-120 dB
Passband Ripple	+/- 0.05 dB
Built-In Test Functions	- Sine wave - Pulse - Instrument noise - Geophone step - Sweep transfer - Auto correlation - Cross correlation
System Check	- Battery status - Equivalent input noise - Total harmonic distortion - Instantaneous dynamic range - Common mode rejection - Cross talk - Time accuracy
Geophone Check	- Impedance - Damping - Natural frequency - Noise - Leakage

Subject to technical changes

Environmental Specifications

Operation Temperature	-30°C to + 70°C
Humidity Range	0 – 95 %
Case	Solid waterproof metal housing deployable in any surface environment

Overall System Performance and Flexibility

Typical Shot Cycling Time

- 10 seconds @ 1 ms sampling rate
- 2 K trace length with 256 channels inclusive data storage; reduced by using multiple USB

Mobile System Control

- via easy to handle standard PC / Laptop

Cables

- Simple low cost two-conductor wire for Snap-on technology or alternatively configured four wire round cable

Connectors

- 55 pin plug input connector
- Snap-on connector or four-wired round cable
- USB 2.0

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