



Key Features

- Small, lightweight, 35mm DIN rail mountable enclosure with UL94 V0 flame retardant rating
- Low power: 0.38 Watt per channel¹
- 4 or 8 seismic sensor channels
- Geophone, Broadband, Force Balance or Piezoelectric digitizer
- Timing and data over single CAT5 cable (if using IMS WoE switch)
- Multi-station Networked or Standalone operating modes
- Compatible with Smart Seismic Sensors (self-configuring)
- Wide dynamic range (24-bit oversample data)
- Software selectable sampling rates
- Continuous streaming of data (triggered recording with netSP)
- Communications (Waveforms over Ethernet) via 10/100Base-TX Ethernet or fibre (using external media converter)
- Geophone state-of-health coil measurements
- Remotely upgradable firmware via netSP and/or Synapse
- On-board temperature measurement and readout

Specifications

ADC Characteristics

Seismic Sensor Channels (analogue, differential).....4 or 8
Sampling Rates².....1 to 192000 sps

Bandwidth³

0 - 48000 Hz.....0.47 f_s
48000 - 92000 Hz.....0.45 f_s
92000 - 192000 Hz.....0.24 f_s

Dynamic Range⁴

at 48000 sps.....118 dB
at 50 sps.....147 dB

Electrical

Supply Voltage.....9 - 18 VDC
Power Consumption¹.....3 W

Physical

Mass.....420 g

Dimensions:

Height.....180 mm
Width.....52 mm
Depth.....165 mm

Environment⁵

Operating Temperature⁶.....-10 - 70°C
Humidity.....20 - 80 % relative humidity, non-condensing

External Interfaces

- Ethernet (10/100Base-TX) with Auto-MDIX (auto-crossover)
- RS-232 2-wire port for time synchronisation
- DC power and feed-through
- 4 or 8 Smart seismic sensor channels (geophone, broadband, piezoelectric and FBA)
- 6 user LEDs
- 2 User push buttons

NOTES:

¹Average power consumption measured on 8 channel version, at 48000 sps, continuously streaming data over 100Base-TX interface.

²Software selectable: 1, 3, 5, 10, 20, 50, 75, 100, 125, 150, 200, 250, 300, 500, 750, 1000, 1500, 3000, 6000, 12000, 24000, 48000, 96000, 192000 sps.

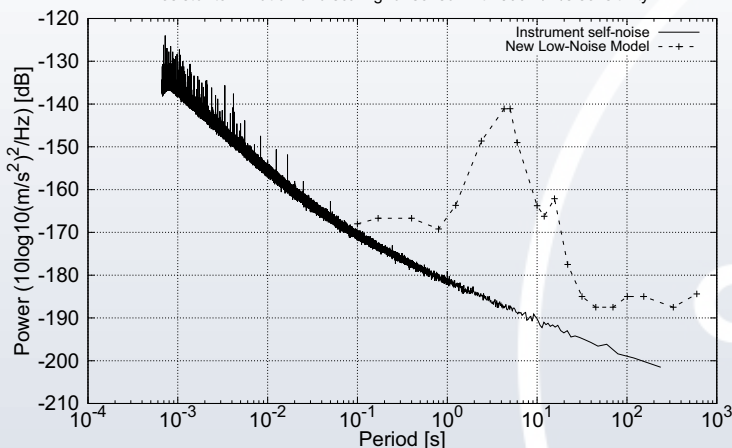
³Bandwidth is related to the sampling frequency f_s .

⁴Dynamic range dependent on sampling rate due to oversampling.

⁵This device is designed to be operated in an enclosed environment. To avoid voiding of equipment warranty, the equipment must be housed in an external enclosure. The external enclosure should have an Ingress Protection Rating of at least IP65. Suitable, customised, pre-wired enclosures are available from IMS upon request.

⁶Individually certified units with wider operating ranges available upon request - please contact IMS for confirmation before order as prices and lead times may vary.

Power spectral density of noise data sampled at 3000 sps, using 300 Ohm resistor termination and scaling for sensor with 800 V/m/s sensitivity



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