



Node specifications

Mechanical

Weight: Dry 65 lb (30 Kg)/Wet 40 lb (18 Kg)
Diameter: 17 in (43.2 cm)
Depth rating: 700 meter
Height: 6 in (15.2 cm)

Analog

Number of channels: 4
1 hydrophone, 3 orthogonal geophones
ADC resolution: 24 bits
Sample intervals: 2 & 4 millisecond
Preamp gains: 0 - 36dB in 6dB steps
Bandpass: DC to 85.8% Nyquist
Low cut filter: Out, 1-60 Hz @ 6dB/octave
Distortion (THD)* <0.0006%
Gain acc ch to ch: 0.50%
EIN RMS (preamps shorted)
0 dB 1.8 microvolt
12 dB 0.6 microvolt
24 dB 0.4 microvolt
36 dB 0.4 microvolt
Maximum input signal RMS
0 dB 1,767.5 millivolts
12 dB 442 millivolts
24 dB 110 millivolts
36 dB 27.5 millivolts
Common mode (CMRR)* >90dB (>40dB hydrophone)
Crossfeed: >100 dB (>80 dB hydrophone)

Electrical

Timing accuracy
Uncorrected: +/- 5 ms @ 15 days
Corrected: +/- 1 ms or ½ sample interval

Power
Lithium-ion batteries
Longevity: 15 days
Recharge time: 8 hours - worst case

Tilt indication: +/- 1.5°

Azimuth indication: +/- 5° (at latitudes +/- 50° of equator)

Flash memory
Capacity: 8 Gbyte

Data interface
Diagnostic: RS232
Data download: proprietary HS serial

Status LED indicating
Power ON, acquisition, error

Data recording station specifications

Data harvester

Mechanical

Weight: ~ 98 lb (44.5 Kg)
Capacity: 6 nodes
Height & width: 13 in (33 cm)
Length: 48 in (121.9 cm)

A single group of up to eight data collection and charging stations (DCCS) with one node box can process up to 48 nodes. With an 8-hour turnaround, this group can process up to 144 nodes in a 24-hour period. Up to 20 such groups may be networked together simultaneously.

Data sorter

Mechanical

Equipment rack
Height: 54.5 inch (138 cm)
Width: 24 inch (61 cm)
Depth: 29 inch (74 cm)

Multiple workstations

Flat panel display, keyboard, mouse

Electrical

Data storage
RAID (Level 6)
Capacity: multiples of 10.5 TB

Output media
MDR, USB, eSATA disks and 3592 tapes

Output format
Receiver gather

Environmental

Power: 85 to 264 VAC, 47 to 63Hz
Operating temperature: +32 to 122°F (0 to 50°C)**
Humidity: 5 to 95% non-condensing**

*2-millisecond sample rate @ 12dB K-gain

**Temperature and humidity specifications may vary due to media selection

FairfieldNodal reserves the right to change specifications without notice.

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