



Node specifications

Mechanical

Weight: Wet 213 lb (97 Kg)/Dry 110 lb (49 Kg)
 Diameter: 21 in (53.3 cm)
 Depth rating: 3000 meter
 Height: 10.5 in (26.7 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: +/- 35 ms @ 60 days
 Corrected: +/- 1 ms or ½ sample interval

Power
 Lithium-ion batteries
 Longevity: 60 days
 Recharge time: 30 hours - worst case

Tilt indication: +/- 1.5°
 Azimuth indication: +/- 5° (at latitudes +/- 50° of equator)

Flash memory
 Capacity: 32 GB

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. Multiple groups may be networked together simultaneously.

Data sorter

Mechanical

Equipment rack
 Height: 54.5 in (138 cm)
 Width: 24 in (61 cm)
 Depth: 29 in (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 63 Hz
 Operating temperature: +32 to 122°F (0 to 50°C)**
 Humidity: 5 to 95% non-condensing**

*2-millisecond sample rate @12 dB K-gain
 **temperature and humidity specifications may vary due to media selection

FairfieldNodal reserves the right to change specifications without notice.