



## Node specifications

### Mechanical

Weight: 4.8 lb (2.2 Kg)  
 Height: 6 in (15.2 cm)  
 Diameter: 5 in (12.7 cm)  
 Detachable 5-in spike (12.7 cm)

### Analog

Number of channels: 1  
 ADC resolution: 24 bits  
 Sample intervals: 1/2, 1, 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

### Electrical

Timing accuracy  
 GPS disciplined to +/- 100 microseconds UTC

Power  
 Lithium-ion batteries  
 Longevity: 288 hours\*\*  
 Recharge time: 5 hours - worst case

Flash memory  
 Capacity: 2 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:  
 Empty ~ 250 lb (113 Kg)  
 Full ~ 460 lb (209 Kg)  
 Capacity: 48 nodes  
 Height: 90 in (229 cm)  
 Width: 48 in (53 cm)  
 Depth: 21 in (53 cm)

An individual data collection and charging rack (DCCR) can process up to 48 nodes. With a five-hour turnaround, each DCCR can process up to 192 nodes per day. Multiple DCCRs can be joined together into a network to increase harvesting capacity.

### 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

\*2-millisecond sample rate @ 12dB K-gain -3dB full scale

\*\*Typical for continuous-mode operation @ 25°C

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