

## Quantum

### FEATURES

- Lightest node on the market today weighing only 650 grams
- Greater than 50 days, 24 Hr operation
- Local 8GB or 16GB data storage

### GENERAL SPECIFICATIONS

Number of analog channels:

1

Data Storage Capacity:

8GB non-volatile flash memory (upgradeable to 16GB)

Integrated Battery:

Rechargeable Li-ion

Battery Life :

Greater than 50 days, 24 Hr operation

100 days @12 hours / day

Wireless Communication Interfaces:

Bluetooth LE

GPS:

L1-GPS/QZSS, GLONASS, BeiDou, Galileo

Timing accuracy:

+/-20  $\mu$ s

Sensor:

Vertical 5Hz or 10Hz high-sensitivity geophone

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:

-40 °C to +70 °C

Water Immersion:

IP 68

### PHYSICAL

Size:

10.9 cm x 9.8 cm x 10.7cm (excl. spike)

(4.4" x 3.9" x 4.2")

Weight:

0.65 kg (1.43lbs) incl internal battery and geophone

\*Typical specifications @ 2 ms @ 25°C



### ANALOG SPECIFICATIONS

A/D Converter:	24-bit
Sample Rates:	1 ms, 2 ms, or 4 ms
Gains:	0 dB, 6dB <sup>1</sup> , 12 dB, 18dB <sup>1</sup> , 24dB <sup>1</sup>
Maximum Input Signal (RMS) :	3.535 V @ 0 dB 1.768 V @ 6 dB 0.884 V @ 12 dB 0.442 V @ 18 dB 0.221 V @ 24 dB
Equivalent Input Noise *(RMS):	1.408 $\mu$ V @ 0 dB 0.712 $\mu$ V @ 6 dB 0.368 $\mu$ V @ 12 dB 0.202 $\mu$ V @ 18 dB 0.132 $\mu$ V @ 24 dB
Instantaneous Dynamic Range *:	128 dB @ 0 dB 128 dB @ 6 dB 128 dB @ 12 dB 127dB @ 18 dB 124 dB @ 24 dB
System Dynamic Range *:	148 dB
Total Harmonic Distortion :	<0.1% with 10Hz HS phone <0.2% with 5Hz HS phone
Channel Matching :	Better than 1%

### AUTOMATED TESTS

Unit temperature, sensor tilt, sensor impedance, system equivalent input noise, sensor noise.