

Quantum®

FEATURES

- All-in-one single component recording unit
- Lightest node on the market today weighing only 650g
- Greater than 50 days, 24 Hr operation
- Local 8GB or 16GB data storage
- Highly visible LED "Health status feedback"

GENERAL SPECIFICATIONS

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|-------------------------|--|
| No. 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 |
| Wireless Communication: | Bluetooth LE, |
| GPS: | L1-GPS /QZSS, GLONASS, BeiDou, Galileo |
| Timing Accuracy: | +/-20 μ s |
| Sensor: | Vertical 5Hz or 10Hz high-sensitivity geophone |
| Charging Temperature: | +5 °C to + 40°C |
| Operating Temperature: | -40 °C to + 70 °C |
| Water Immersion: | IP68 |

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 ¹ , 12 dB, 18dB ¹ , 24dB ¹ |
| Maximum Input Signal (RMS): | 3.535 V @ 0 dB , 1.768 V @ 6 dB 0.884 V @ 12 dB, 0.442 V @18dB 0.221 V @ 24 dB |
| Equivalent Input Noise* (RMS): | 1.408 μ V @ 0 dB 0.712 μ V @ 6 dB, 0.368 μ V @ 12 dB 0.202 μ V @ 18 dB, 0.132 μ V @ 24dB |
| 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% |
| Anti-Alias Filter: | 3dB @ 0.876 fN (Nyquist) |
| Filter Options: | Linear or Minimum Phase |

AUTOMATED TESTS

Unit temperature, sensor tilt, system equivalent input noise, sensor noise, dynamic range, geophone DC resistance, THD, natural frequency, damping, sensitivity

¹ Gain option when operating in hybrid with G3i® HD