

# Quantum®

## Accuseis Sensor Option

### FEATURES

- All-in-one single component recording unit with internal MEMS sensor
- Operated through INOVA's Command and Control software
- Patented MEMS accelerometer and custom electronics to record P-wave data
- Offers flat amplitude and phase response over a wide frequency range
- Insensitivity to tilt-degradation enables faster deployment
- Automatic tilt correction and updating of measured tilt



### QUANTUM SPECIFICATIONS

Data Storage Capacity: 16 GB non-volatile flash memory

Integrated Battery: Rechargeable Li-ion

Battery Life: 23 days typical, 24 Hr operation

Wireless Communication: Bluetooth LE, HyperQ

GPS: L1-GPS /QZSS, GLONASS, BeiDou, Galileo

Timing Accuracy:  $\pm 20 \mu\text{s}$

Charging Temperature:  $+5 \text{ }^\circ\text{C}$  to  $+40 \text{ }^\circ\text{C}$

Operating Temperature:  $-40 \text{ }^\circ\text{C}$  to  $+70 \text{ }^\circ\text{C}$

Water Immersion: IP68

### SENSOR SPECIFICATIONS

Digital Quantization: 24 Bits (23 + Sign)

Sample Rate: 4 ms, 2 ms, 1 ms

Time Standard: Phase locked to GPS clock

Full Scale (peak): Normal Mode:  $3.3 \text{ m/s}^2$  (335mG)  
Large Signal Mode:  $4.9 \text{ m/s}^2$  (500mG)

Noise: Normal Mode:  $0.3 \mu\text{m/s}^2/\text{VHz}$  (30nG/VHz)  
3 Hz to 400 Hz

Dynamic Range: Normal Mode: 118 dB

Frequency Response: 0 to 400 Hz

Digital High-Cut Filter: 0.82 Nyquist

Total Harmonic Distortion:  $< -100 \text{ dB}$