

YOUNG ANT

Small and smart integrated seismic nodes with high reliability.



-  560g (Light weight)
-  No connectors (Wireless charging/wireless Harvesting)
-  Mobile APP (High efficiency for deployment)
-  Automatic matching by GNSS coordinate
-  Bluetooth QC (View waveforms and locate devices via the APP)

-  Built-in signal generator
-  Smart power on/off
-  50 Day (12-hour recording)
-  Supports GPS/BeiDou/Glonass/Galileo positioning and timing

Physical Specs

Size	55 mm*55 mm*148 mm (without spike)
Operating life@25°C	25 days@2 ms continuous; 50 days@2 ms segmented (12 hours ON/12 hours SLEEP)
Weight	560 g (without spike)
Waterproof	IP68
Operating temperature	-40°C to +70°C
Charging time	3.5 h

Sensor Specs

5 Hz (Option 1)

Distortion	≤0.1%
Natural frequency	5 Hz ± 7.5%
Coil resistance	1850 Ω ± 5% 0.7
Damping	± 7.5%
Effective frequency range	0.2 - 1000 Hz
Sensitivity	76.7 V/m/s ± 5%

10 Hz (Option 2)

Distortion	≤0.1%
Natural frequency	10 Hz ± 3.5%
Coil resistance	1800 Ω ± 3.5%
Damping	0.7 ± 5%
Effective frequency range	0.5 - 1000 Hz
Sensitivity	78.7 V/m/s ± 3.5%

Channel Performance

Anti-alias filter	206.5 Hz@2 ms (82.6% Nyquist frequency) optional linear phase and minimum phase
Equivalent input noise	0.5 uV@0.25 ms / 0.2 uV@2 ms / 0.14 uV@4 ms
Number of channels	1
ADC resolution	32 bits
Sampling rate	0.25, 0.5, 1, 2, 4 ms
Preamplifier gain	0-24 dB (6dB steps)
Low cut filter	1 Hz, DC removed or disable
0 dB @ max Input	2.5 V peak
Timing accuracy	±10 μs
Maximum input signal	±2.5 V peak@Gain 0 dB
Instantaneous dynamic range	118.9dB@0.25ms / 126.8dB@2ms / 130dB @4ms
Total dynamic range	145 dB
Internal storage	Extended from 8GB to 32GB
Built-in GPS	GPS, BDS, GLONASS, GALILEO (concurrent reception) are used for timing and positioning