China Geophysical

YOUNG ANT 3C

New generation ultra-high resolution 3C seismic node.

Physical Specs

Size	90 mm*100 mm*128/189 mm (without spike)
Operating life@25°C	40 days@2 ms continuous; 80 days@2 ms segmented (12 hours ON/12 hours SLEEP)
Weight	1750 g (5 Hz) / 2200 g (2 Hz), without spike
Waterproof	IP68
Operating temperature	-40°C to +70°C
Charging time	6.5 h

Sensor Specs

5 Hz (Option 1)

Distortion	≤0.2%
Natural frequency	5 Hz ± 7.5%
Coil resistance	1850 Ω ± 5%
Damping	0.7 ± 7.5%
Effective frequency range	0.2 - 1000 Hz
Sensitivity	80 V/m/s ± 5%

2 Hz (Option 2)

Distortion	≤3%
Natural frequency	2 Hz ± 15%
Coil resistance	6400 Ω ± 10%
Damping	0.7 ± 15%
Effective frequency range	0.1 - 300 Hz
Sensitivity	260 V/m/s ± 15%

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	3
ADC resolution	32 bits
Sampling rate	0.25, 0.5, 1, 2, 4, 8, 10, 20 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 32GB to 128GB
Built-in GPS	GPS, BDS, GLONASS, GALILEO (concurrent reception) are used for timing and positioning

Kg Integrated design, lightweight and compact

No connectors (Wireless charging/wireless Harvesting)

Built-in 4G module (Real-time waveform view)

High-precision clock (Timing accuracy ±10 µs)

Bluetooth QC (View waveforms and locate devices via the APP)

Built-in signal generator

Smart power on/off

40 Day (24-hour continuous operation and internal storage)

Supports GPS/BeiDou/Glonass/Galileo positioning and timing