

ZLAND 3C



Typical Node specifications

Seismic Data Channels: 3

ADC Resolution: 24 bits

Sample Interval

0.5, 1, 2, 4 milliseconds

Preamplifier Gain

0 dB to 36 dB in 6 dB steps

Anti-Alias Filter

206.5 Hz @ 2ms (82.6% of Nyquist),
Selectable - Linear Phase or Minimum Phase

DC Blocking Filter

1 Hz to 60 Hz, 1 Hz increments,
6 dB/Octave, or OUT

Operating Temperature Range

-40 °C to +60 °C

Operating Life

35 days (720 hours)
Continuous @ 2ms

60 days Segmented (12 hours ON/
12 hours SLEEP)

Acquisition Channel

(@ 2ms sample interval, 25 °C, 31.25 Hz,
internal test, unless otherwise indicated)

Total Harmonic Distortion
0.0002% @ 12 dB Gain, -3 dB Full Scale

Equivalent Input Noise
0.75 μ Vrms @ 0 dB
0.2 μ Vrms @ 12 dB
0.1 μ Vrms @ 24 dB
0.1 μ Vrms @ 36 dB

Full Scale Input Signal
2500 mV peak @ 0 dB
625 mV peak @ 12 dB
156 mV peak @ 24 dB
39 mV peak @ 36 dB

DC Offset <10% of Input Noise with DC
Blocking Filter IN

Gain Accuracy: 0.50%

Dynamic Range
127 dB @ 0 dB Preamplifier Gain

Common Mode Rejection Ratio
>110 dB

Timing Accuracy
 \pm 10 μ seconds GPS Disciplined

Instrument Tests

Internal Noise (preamp input terminated)

Internal THD

Internal Gain Accuracy

Internal CMRR

Internal Impulse

Sensor Impedance

Sensor Step Response

Sensor DC Resistance

Sensor

3 Geophones, Orthogonal Configuration

10 Hz - 70% damped,
2 V/i/s (78.7 V/m/s)

5 Hz - 70% damped,
1.95 V/i/s (76.7 V/m/s)

Battery

Type: Rechargeable Li-Ion

Charging Temperature Range
+5 °C to +40 °C

Recharge Time: <4 hours

Physical

Weight: 6.2 lb (2.8 kg), including spike

Dimensions: 4.6 in (11.7 cm) diameter by
6.4 in (16.3 cm) high

Detachable Spike: 4.6 in (11.7 cm) long,
detachable

FairfieldNodal reserves the right to change specifications without notice to provide the best possible product.

April 2015

fairfieldnodal.com



SYSTEMS

ACQUISITION

LICENSING

PROCESSING

IMAGING