

# 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 Continuous (@ 2 ms, 25 °C)

60 days Segmented  
(12 hours ON/12 hours sleep @ 2 ms, 25 °C)

### 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  $\mu$ Vrms @ 0 dB  
0.2  $\mu$ Vrms @ 12 dB  
0.1  $\mu$ Vrms @ 24 dB  
0.1  $\mu$ 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  
 $\pm 10$   $\mu$ 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.

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