



Preliminary Remote Unit Typical Node Specifications

Seismic Data Channels: 4

ADC Resolution: 24 bits

Sample Interval

0.5, 1, 2, 4 ms

Preamplifier Gain

0 dB to 36 dB in 6 dB steps

Anti-Alias Filter

206.5 Hz (82.6% of Nyquist) @ 2 ms,
Linear Phase

DC Blocking Filter

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

Operating Temperature Range

-10 °C to +60 °C

Operating Life

300 days of 2 ms acquisition over
5 year installation

Acquisition Channel

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

Total Harmonic Distortion
0.0003% @ 12 dB gain, -3 dB Full Scale

Equivalent Input Noise

1.0 μ Vrms @ 0 dB

0.4 μ Vrms @ 12 dB

0.3 μ Vrms @ 24 dB

0.3 μ Vrms @ 36 dB

Full Scale Input Signal

2500mV peak @ 0 dB

625mV peak @ 12 dB

156mV peak @ 24 dB

39mV peak @ 36 dB

Gain Accuracy: 0.50%*

Dynamic Range

120 dB @ 0 dB Preamplifier Gain

Crossfeed

<-100 dB Geophone Channels <-80 dB

Hydrophone Channel**

Common Mode Rejection Ratio

>+90 dB Geophone Channels >+40 dB

Hydrophone Channel**

DC Offset

<10% of Input Noise with DC Blocking

Filter IN

Timing Accuracy

< \pm 1 ms – corrected post-acquisition

Self Test Features

Internal Noise (preamp input terminated)

Internal THD

Internal Gain Accuracy

Internal CMRR

Internal Crossfeed

Internal Impulse

Sensor Impedance

TBD

Sensors

Geophone

3 orthogonal, omni directional

15 Hz @ -3 dB, 70% damped

1.76 V/in/s (69.3 V/m/s)

Hydrophone: 3 Hz @ -3 dB, 8.9 V/Bar

Orientation: \pm 1.5° tilt indication

\pm 5° azimuth (at Latitudes within \pm 50°
of the Equator)

Pressure: TBD

Physical

Weight: 170 lb (77 kg) in air, 85 lb (39 kg) in
water

Dimensions: 19.9 in. diameter by 10 in. high

Operating Depth: 4000 m

* Does not include high-impedance low-cut filter for directly coupled hydrophone interface.

** Channel includes high-impedance low-cut filter for directly coupled hydrophone interface.

All specifications relate to Remote Unit Part Number 221.8800.0001 only.

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

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