

NuSeis™ NRU D3



Seismic Data Channel

3C

ADC Resolution

24 bit Delta Sigma

Sample Interval

0.5ms, 1ms, 2ms, 4ms

Preamplifier Gain

Programmable 0dB to 42dB in 6dB steps

Low Cut Filter

Optional

Anti-alias Filter

- 206.5Hz @2ms, 413 Hz @1ms
- Linear Phase or Minimum Phase

Operating Temperature Range

-30° C to +75° C

Operational Autonomy

- 12 Hours per day: +100 days
- 24 Hours per day: +50 days

Weight

Without spikes or base: 1.8Kg

With 3 spikes or solid surface base: 1.9Kg

Dimensions

139mm x 125mm x 162mm (H)

Battery

- 52.0 Ah Li-Ion
- Charge Temperature Range:
0° C ~ +45° C
- Cycle Life: > 500 cycles to 80%

Acquisition Channel

@2ms sample interval, 25°C, 31.25 H

- Maximum input signal: 1768 mVrms @0dB
- Total Harmonic Distortion: 0.0001% @31.25Hz
- Instantaneous Dynamic Range: 127dB @2ms
- System Dynamic Range: 148dB
- Equivalent Input Noise:
 - 1500 nV @0dB
 - 400 nV @12dB
 - 160 nV @24dB
- Gain Accuracy: 0.25% unit to unit
- Input Impedance: 100k Ohm
- Timing Accuracy: +/- 12.5µsec
customizable at client request

Instrument Test

Internal Noise, Total Harmonic Distortion, Impulse Response

Sensor Test

- Resistance
- Impedance
- Damping
- Natural Frequency

Sensors

- Internal, 3 Orthogonal Geophones
- 2 Hz (+/- 20%) / 5 Hz (+/- 7.5%)
- 22 V/m/s (+/- 20%) / 80 V/m/s (+/-5%)
- Other geophones available upon request

Memory

64 GB standard (upgradeable to 128 GB)