

NuSeis™ NRU 1C™

Autonomous, Continuous, Nodal Recording Unit



**Smaller. Lighter.
Faster. Stronger.**

- Self-contained nodal seismic recording unit
- 1 channel, 24-bit digitization
- Internal and/or external battery
- Internal or external geophone
- Integrated, high sensitivity GNSS
- High-speed USB download
- Robust two-part, water-tight polymer assembly
- Aluminum locking rings
- 4 stainless steel contacts for charging & data offload



Seismic Data Channel

1C (available 3C in Q3 2019)

ADC Resolution

24 bit Delta Sigma

Sample Interval

0.5ms, 1ms, 2ms, 4ms

Preamplifier Gain

Programmable 0dB to 42dB in 6dB steps

Anti-alias Filter

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

Low Cut Filter

None

Operating Temperature Range

-40° C to +75° C

Operational Autonomy

- 560 Hours
- 12 Hours per day: 46 days
- 24 Hours per day: 23 days

Weight

.690 kg, 1.5 lbs

Dimensions

- Max 53.5 mm tube, 209 mm long
- Max 2.1" tube, 8.23" long

Battery

- 13.4Ah Li-Ion
- Charge Temperature Range: 0° C ~ +45° C
- Cycle Life: >500 cycles to 80%

Acquisition Channel

@2ms sample interval, 25°C, 31.25 Hz

- Maximum input signal: 1768 mVrms @0dB
- Total Harmonic Distortion: 0.0001% @31.25Hz
- Instantaneous Dynamic Range: 127dB @2ms
- System Dynamic Range: 140dB
- Equivalent Input Noise:
 - 1500 nV @0dB
 - 400 nV @12dB
 - 160 nV @24dB
- Gain Accuracy: 0.25% unit to unit
- Input Impedance: 20k Ohm
- Timing Accuracy: +/- 12.5µsec customizable at client request

Instrument Test

Internal Noise, Total Harmonic Distortion, Impulse Response

Sensor Test

Resistance, Impedance, Noise

Sensor

- Internal, Single Geophone
 - 5Hz or 10 Hz +/- 3.5%
 - 85.8 V/m/s +/- 3.5%
- Other geophones available upon request

Memory

8 GB standard (expandable to 16, 32 or 64 GB)

Learn More at geophysicaltechnology.com

All specifications subject to change without notice

