

MAKE NUSEIS YOUR SEIS!

# NuSeis<sup>TM</sup>

## NRU EL1

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

- Self-contained nodal seismic recording unit
- 1 channel, 24-bit digitization
- Integrated, high sensitivity geophone 2Hz, 5Hz, or 10Hz
- Operational Autonomy: 40 days at 24hr per day
- Robust two-part, water tight polymer assembly
- 4 stainless steel contacts for charging & data offload

**Autonomous, Continuous, Nodal Recording Unit**

Can be **BURIED COMPLETELY** to  
reduce noise & theft



[www.geophysicaltechnology.com](http://www.geophysicaltechnology.com)

## Seismic Data Channel

1C

## ADC Resolution

24 bit Delta Sigma

## Sample Interval

0.25ms, .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

- 46950 1 cell 27.4Ah
- 12 Hours per day: 83.2 days
- 24 Hours per day: 40 days

## Weight

990g

## Dimensions

321mm x 70mmØ

## Battery Options

- 1 Cell 46800 23.4Ah Li-Ion
- 1 Cell 46900 28Ah Li-Ion
- 1 Cell 46110 38Ah Li-Ion
- 4 Cell 18650 13.4Ah Li-Ion
- Charge Temperature Range: 0°C to 55°C
- Cycle Life: > 100 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: 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
- Noise
- Damping
- Natural Frequency

## Sensor

- Internal, Single Geophone
  - 5Hz, +/- 7.5%
  - 80 V/m/s +/- 5%
- 2Hz and 10Hz geophones available upon request

## Memory

8 GB standard (expandable to 64 GB)