



**SPECIFICATIONS
 ZLAND NODE (REMOTE DATA ACQUISITION UNIT)**

WEIGHT	4.8 lb (2.17 kg)
SIZE	5 inches(12.7cm) diameter by 6 inches(15.2cm) high
DETACHABLE SPIKE	5 inches(12.7cm) long
OPERATING TEMPERATURE RANGE	-40 to +60 degrees C (Battery Charging: +3 to +45 degrees C)
BATTERY TYPE	Rechargeable Li-Ion
RECHARGE TIME	5 hours(max)
OPERATING LIFE	12 days (Continuous @25°C)
DATA STORAGE	2GB NAND Flash Memory

Signal Conditioning Specifications @ 2ms, 25°C, 31.25Hz, internal test, unless otherwise indicated:

SEISMIC DATA CHANNELS	1
ADC RESOLUTION	24 bits
SAMPLE INTERVALS	0.5, 1, 2, 4 milliseconds
PREAMPLIFIER GAIN	0, 12, 24, 36 dB
LOW-CUT & DC OFFSET FILTER	OUT to 60Hz in 1Hz increments, 6dB/octave
ANTI-ALIAS FILTER	Fixed by Sample Interval (214.5Hz @ 2ms), Linear Phase
TOTAL HARMONIC DISTORTION	0.0006% @ 12dB gain, -3dB Full Scale
EQUIVALENT INPUT NOISE (Channel Inputs Terminated)	

GAIN dB	GEOPHONE uVrms
0	1.8
12	0.6
24	0.4
36	0.4

DC OFFSET	<10% of Input Noise with DC Offset Filter enabled
FULL SCALE INPUT SIGNAL	2500 mV pk @ 0dB 625 mV pk @12dB 156 mV pk @ 24dB 39 mV pk @ 36db
DYNAMIC RANGE	120dB @ 0dB Preamp Gain
CROSSFEED	< -100dB
COMMON MODE REJECTION RATIO	>90dB
GAIN ACCURACY, CHANNEL TO CHANNEL	0.50%
TIMING ACCURACY	GPS Disciplined to ±100 microseconds UTC

SENSOR CONFIGURATION	1 Geophone
GEOPHONE TYPE	Oyo-Geospace GS30CT
GEOPHONE SENSITIVITY	0.50 V/in/sec
GEOPHONE LOW-CUT	10Hz (-3dB)

SELF-TEST FEATURES	Internal Noise (preamp inputs terminated) Internal THD Internal Gain Accuracy Internal CMRR Internal Crossfeed (not applicable for single-channel unit) Internal Impulse Sensor Impedance
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