

STS-2.5

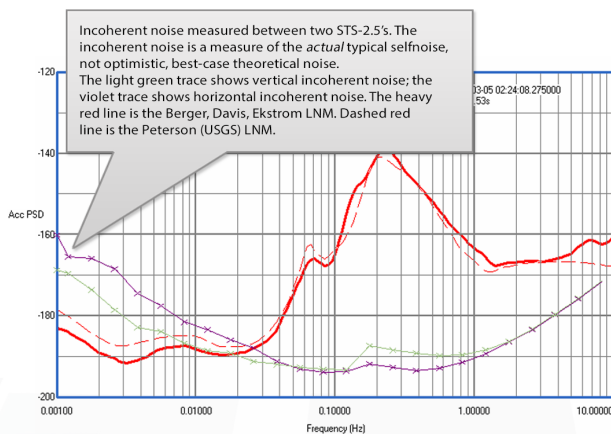
High-Performance Portable Very Broadband Triaxial Seismometer

The World standard broadband seismometer other seismometers are compared to, with very low noise, high clipping level, low power, and wide operational temperature range without adjustment.



FEATURES

- Sensor performance equal to the world-standard STS-2 broadband sensor
- Improved high magnitude signal behavior compared to STS-2
- Improved ruggedness of cabling and hermetically sealed hostbox includes push button, visual status and robust one-press centering
- RS232 remote monitoring (serial number, inside temperature and humidity, power supply levels, tilt)
- Auxiliary signals (POS/RAW) and control of centering and locking either available by RS232 or direct access via remote command
- Improved tilt range compared to STS-2
- Significantly improved operating temperature range without centering; key requirements in many installations due to daily temperature variation



World-standard, Field-proven - 145 dB dynamic range - Mutually-aligned 3-components
Robust locking - Low power - Wide temperature range without adjustment

SPECIFICATIONS

Response:	Flat to ground velocity from 8.33mHz (120s) to 50 Hz
Displacement resolution:	6.4×10^{-13} m/hz @10Hz (= -172dB)
Clip level:	± 13 mm/s ground velocity up to 20Hz Linear derating down to ± 5.3 mm/s ground velocity from 20 - 50Hz
Clip level normalized to gravity:	20.50Hz 0.34g / 10Hz 0.17 / 1Hz 0.017g / 0.1Hz 0.0017g / 0.03Hz 0.00055g
Generator constant:	2 x 750 Vsec/m
Parasitic resonances:	>140Hz vertical, >80Hz horizontal
No centering Tilt range:	$\pm 0.03^\circ$, (centering range limit $\pm 0.48^\circ$)
No centering Temperature range:	$\pm 25^\circ$ C
Power supply voltage:	10 - 30VDC, galvanically isolated
Power consumption:	Average: 0.45W, deteriorated state: up to 2.0W
Seismic signals output:	max. ± 20 V differential, 220 Ω serial resistance per line
Auxiliary signal output:	max. ± 10 V single-ended, 1k Ω serial resistance
Calibration input:	max. ± 10 VDC
Control inputs:	3 - 30VDC, 0.5mA, galvanically isolated
Communication:	Push buttons or RS232, 9600 Baud, galvanically isolated
Operating temperature:	-20 $^\circ$ C to 70 $^\circ$ C guaranteed, -40 $^\circ$ C to 70 $^\circ$ C functional
Humidity:	0-100% RH
Enclosure Rating:	IP67 Equivalent
Various:	RoHS and CE Compliant Unit
Size:	Cylindrical package, ϕ 235mm, height 260mm (same package as STS-2)
Weight:	12kg