SPECIFICATIONS

Trillium BH

Specifications subject to change without notice.

TECHNOLOGY	
Topology	Symmetric triaxial
Feedback	Force balance with capacitive transducer
Self-Leveling	Internal automated leveling +/- 5°
Leveling Initiation	Control line or serial port command
Mass Centering	Motorized re-centering automatically initiated during leveling sequence
Holelock	Motorized single jaw, non-jamming Adaptable to a wide range

PERFORMANCE	
Self-noise	See plot at right
Sensitivity	1200 V-s/m ±0.5% precision
Bandwidth	-3 dB points at 120 s and 150 Hz
Clip Level	>16.6 mm/s up to 10 Hz and 0.17 g above 10 Hz
Temperature	±45°C without re-centering

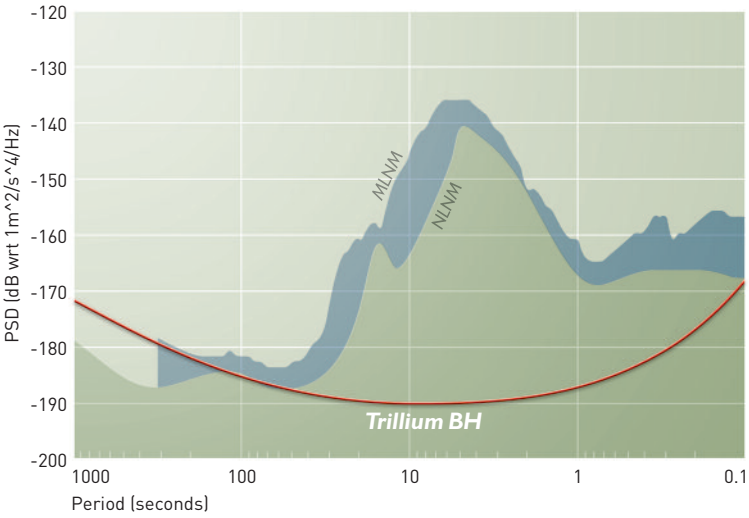
INTERFACE	
Connector	20-pin marine
Velocity Output	40 V peak-to-peak differential Selectable XYZ or UVW mode
Mass Position Output	Three independent voltage outputs
Calibration Input	Single voltage input for all channels, independent calibration enable for each channel Calibration in XYZ or UVW
Control Lines	Auto-level & Mass Center, Calibration Enable, XYZ/UVW mode
Serial Port	RS-232 compatible serial IP (SLIP) Onboard web server standard HTTP For enhanced instrument control and status: Self-leveling and mass centering, UVW/XYZ mode, short/long period mode, firmware updates, temperature, mass position, instrument status, serial number and factory info

POWER	
Supply Voltage	9 to 36 Volts DC isolated input
Power Consumption	560 mW typical at 15 V input 1.5 A to operate holelock
Protection	Reverse-voltage protection Auto-resettable over-current protection (No fuse to replace)

PHYSICAL	
Case Design	Stainless steel pressure vessel and holelock
Diameter	143 mm (5.6")
Height	886 mm (34.9") not including connector or actuator guard pipe
Weight	30 Kg
Handling	Eye bolt on lid for lifting cable 1300 lbf (5800 N) rated

ENVIRONMENTAL	
Operating Temp.	-40°C to +55°C
Storage Temp.	-60°C to +75°C
Water Immersion	Rated to IP68 and NEMA6P for prolonged submersion
Shock	20 g half sine, 5 ms without damage, 6 axis No mass lock required for transport

SELF-NOISE PERFORMANCE PLOT



Seismometer self-noise plotted against NLNM (after Peterson, 1993) and MLNM (after McNamara and Buland, 2004)