

## HS50 HEAVE SENSOR



Whether in ports and harbours, offshore or as part of a hydrographic mapping programme, the need to measure ocean depths with the utmost accuracy is vital.

The VT TSS HS50 heave sensor has been developed to work with a wide range of modern single beam echo-sounders. With their design allowing acceptance of correction data from the HS50, real-time heave compensation of the sounder data is now achievable. Providing heave data in analogue and digital format, the outputs of the HS50 are easily configurable via a simple operator's menu.

Compact, ruggedised and quick to install, the sensor is supplied with all associated cabling necessary for interfacing and is accompanied by a comprehensive operation manual.

In addition to echo-sounder compensation, the HS50 is ideally suited to a wide range of offshore applications including crane and winch control, wave radar and ship motion measurement.

Covered by a comprehensive warranty, the HS50 also has free technical telephone support for the total life of the product.

### Features:

- Heave measurements to meet IHO standards
- Provides cost savings by increasing weather windows for survey
- Compact design with robust gimbal assembly including integral vibration mounts
- Provides accurate real-time heave data
- Removes vertical motion errors from survey data
- Eliminates the need for post-processing
- Suitable for a wide variety of vessels
- Free telephone support for life of product
- Designed to provide operators with the optimum cost benefit solution

**Low cost heave sensor measurement eliminating errors from single beam echo-sounders and other marine applications**



**SG Brown**

# HS50 HEAVE SENSOR

TECHNICAL SPECIFICATIONS		
Accuracy	5cm RMS or 5% whichever is greater	
Range	±10m	
Resolution	Digital: 1.0cm    Analogue: 0.5cm	
Bandwidth	0.05 to >10 Hz	
Acceleration range (vertical)	±2g	
Noise (with cut-off frequency 0.05 Hz)	<2cm RMS	
Digital interfacer	Primary comms: RS232 or RS422 (1200 to 19,200 baud)	
Analogue output channel	Scale and offset	Operator selectable
	Range	±10v
	Resolution	12 bit
	Minimum load	10 K $\Omega$ /30nF
Output data rate	50 Hz (analogue and digital)	
Power requirement	10 – 36 V dc (6W)	
Dimensions	173mm (diameter) x 230mm (h)	
Weight	5.9 Kg (cables 2 Kg)	
Standard housing material	Hard anodized aluminium, dyed black	
Temperature range	Performance	0°C to 40°C
	Operating	0°C to 55°C
	Storage	-10°C to +55°C
Enclosure ingress protection	IP65	
Approvals	BS EN 50081-1: 1994, BS EN 50082-2: 1994 Designed in accordance with LR ENV2	
Shock (survival)	60g	
Vibration (operating)	30mm/s or 0.2mm, 7-300 Hz	
Transverse acceleration	100mg 0.75s half-sine	
Tilt	±25° any plane (keep upright for transit/storage)	
Warranty	15 months international warranty including parts and labour	

Due to continuous development, specifications may vary from those listed above.



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