

# TSS DMS-05 DYNAMIC MOTION SENSOR



## GENERAL DESCRIPTION

### Motion Measurement for Multibeam Echosounders

To benefit fully from the abilities of modern multibeam echosounders and to ensure accuracy standards are maintained and improved, total data confidence must extend across the full cross-track swath width and throughout vessel manoeuvres.

The DMS-05 is designed specifically for the emerging needs of multibeam users allowing highly productive surveys aboard small boats, in rough sea conditions

undertaking tight turns and rapid speed changes. Using an emerging generation of processing techniques optimised for the high dynamic marine environment the Sensor provides the ability to combine GPS data with new low-cost inertial sensors, to achieve 0.05° optimal accuracy at an affordable price.

Compact, lightweight and quick to install, the DMS-05 provides real-time heave, roll and pitch in analogue and digital form. All outputs are configurable via a simple operator menu. The Sensor can interface to an optional GPS unit or external GPS/DGPS or a speed log if already available. The auxiliary input also accepts Heading Gyrocompass data.

DMS-05 provides accurate vessel motion measurement for multibeam echosounders to achieve high productivity while maintaining IHO standards.

#### Features

- **Advanced processing techniques and high grade inertial sensing elements**
- **GPS/DGPS or speed log input**
- **Compact unit with heading point and low power consumption**
- **Real-time digital and analogue updates**

#### Benefits

- **Full utilisation of all echosounder beams and survey to IHO standards**
- **High dynamic accuracy and immunity to vessel turns and speed changes**
- **Easy and convenient installation**
- **No data timing errors**



**Making  
technology  
work for you!**

**OCEANSCAN LIMITED**

**DENMORE ROAD, BRIDGE OF DON, ABERDEEN,  
SCOTLAND, U.K., AB23 8JW**

**TEL: +44(0)1224 707000, FAX: +44(0)1224 707001**

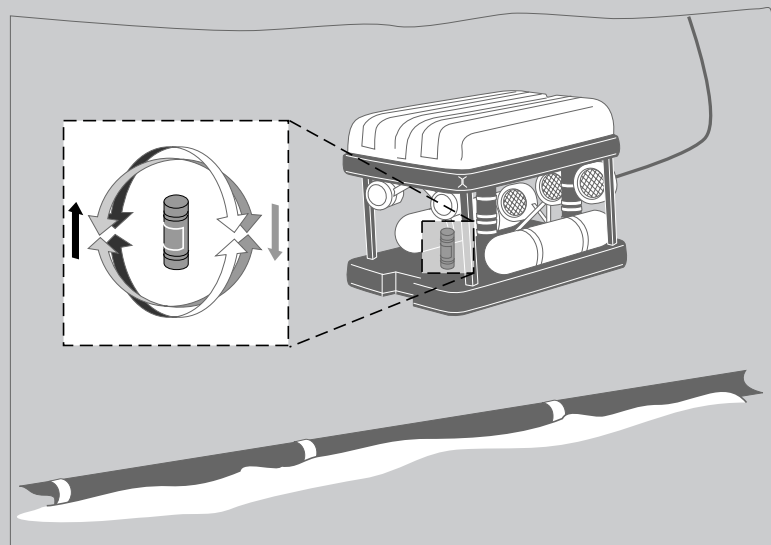
**Email: [rental@oceanscan.co.uk](mailto:rental@oceanscan.co.uk), Website: [www.oceanscan.co.uk](http://www.oceanscan.co.uk)**

**Accredited to BS EN ISO 9001:2000**

# TSS DMS-5 DYNAMIC MOTION SENSOR

## TECHNICAL SPECIFICATIONS

<b>Accuracy</b>	Heave Roll & Pitch	The greater of 5cm or 5% 0.03° at ±5° (mounted on CG) 0.05° at ±30° (mounted off-axis)
<b>Range</b>	Heave Roll & Pitch	±99m ±50°
<b>Resolution</b>	Heave Roll & Pitch	1cm Digital 0.01° (RS232 or RS422) Analogue 0.024° (12-bit ±50° -10V ~ +10V)
<b>Bandwidth</b>	Heave Roll & Pitch	0.05 - 10Hz 0 - 10Hz
<b>Update Rate</b>	Digital: up to 200Hz Analogue: up to 500Hz	
<b>Dimensions</b>	257mm (L) x 127mm (H) x 171mm (W)	
<b>Weight</b>	4.8 kg	
<b>Temperature Range</b>	Operating: 0° to +40°C	Storage: -20° to +70°C
<b>Power Requirement</b>	18 to 36V d.c. (15W).	Option: PSU 90 to 260V a.c.
<b>Velocity Input Packet</b>	NMEA 0183	
<b>Formats</b>	TSIP (Trimble Standard Interface Protocol)	
<b>Heading Input Packet Formats</b>	NMEA 0183; SGB; Robertson	



**Making  
technology  
work for you!**

Marketed By

