

The DMS is designed specifically for the motion measurement needs of the marine industry. From enabling highly productive swath survey from small launches to providing safety-critical helideck monitoring on FPSOs. DMS provides accurate motion measurement in all sea conditions incorporating external velocity aiding performance during dynamic manoeuvres.

The creation of single chassis, uncluttered and formatted to feature a single electronics board, incorporates the latest manufacturing techniques and electronics components to maximise reliability. Smaller and lighter than its predecessor the new design improves predecessor overall performance with added key features that increase the operational flexibility of the motion sensor.

In addition to configurable outputs the DMS provides real-time heave, pitch and roll in analogue and digital formats.

FEATURES AND BENEFITS

- Plug and play installation
- Industry standard
- Configurable outputs
- Real-time digital and analogue outputs
- Compact size and weight
- Flexible orientation
- EMC and CE rated
- Dynamic roll & pitch accuracy to 0.05 °
- Depth rated to 3000m
- Enables survey to 11HO standards
- No data latency
- Optional internal heading
- Field repairable
- Accepts external velocity aiding
- High dynamic accuracy during vessel turns and manoeuvres
- Multi-beam echosounders
- Single-beam echosounders
- Acoustic positioning
- Dynamic positioning
- ROV / AUV monitoring and control
- Helideck monitoring
- Vessel monitoring and control
- ADCP
- Platform monitoring



TECHNICAL SPECIFICATION

	ACCURACY	RANGE	RESOLUTION	BANDWIDTH
Heave	0.05 ° at ±30 ° R/P	±10m	1cm	MDL 10Hz
Roll & Pitch	5cm or 5% whichever is greater	±30 °	Digital - 0.01 ° Analogue - 12bit	MDL 10Hz
Update Rate	Digital - up to 200Hz, Analogue - up to 500Hz			
Dimensions	210mm x 110mm Diameter (excluding connector and mounting plate)			
Weight	<5kg (in water @ 2kg)			
Temp. range	Operating: 0 ° to 55 °C Storage: -20 ° to 70 °C			
Power requirements	10-36V approx 14W			
Velocity input packet formats	NMEA0183 (requires VTG & GLL or GGA); TSIP; Doppler Speed Log			
Heading input packet formats	NMEA 0183; SGB; Robertson; Sperry LR 40/60			
Depth rating	3000m. Up to 6000m available as bespoke items			
Optional field support kit	Enables field replacements of certain components			
Shock (survival)	30g peak 40ms half-sine			
Vibration (operating)	30mm/s ² or 0.2mm, 7-300 Hz			
Yaw immunity	10 ° per second with 30 ° roll and pitch			
Interface	Digital; RS232 or RS422 (software selectable) Analogue; Configurable			

Note: Dynamic Positioning Services reserve the right to amend this specification without prior notice.