

# DMM

## DECK MOTION MONITOR

# Motion accuracy for helideck safety.

The TSS Deck Motion Monitor (DMM) system is a combination package of hardware and software, designed to deliver the particular range of information demanded for use in helicopter flight operations involving a moving vessels or platforms.

DMM specifically meets the recommendations contained in the Civil Aviation Authority (CAA) publication CAP437 – Offshore Helicopter Landing Areas – a guide to criteria, recommended minimum standards and best practices. The system delivers the full range of measurements defined in Chapter 6, paragraph 6.3 of the CAP437 publication.

The DMM displays peak measurements of vertical displacement (heave); port and starboard roll; and up and down pitch of the vessel as measured by the system during the previous 10 minute period.

The DMM comprises two primary sub-systems:

- A DMS-25 motion sensor with its cable and sensor manual
- An optional DMM workstation running the proprietary DMSView graphical display software. The workstation includes the appropriate 32-bit MS Windows™ operating environment necessary to run the display software. The software will run but will not display the CAP437 features unless it has a TSS-supplied hardware key (or 'dongle') fitted to the parallel printer port.

### Features

- Meets CAA CAP437 requirements for deck motion measurement
- Incorporates latest silicon gyro technology
- Compact motion sensor with low power consumption
- Simple installation and ease to use operating software – DMSView for Windows™
- Flexible mounting orientation
- EMC and CE rated



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## TECHNICAL SPECIFICATIONS

MOTION SENSOR	Heave	Roll & Pitch
Accuracy	5cm or 5% whichever is greater	0.25°
Maximum range	±10m	±60°
Resolution	1cm	Digital: 0.01° Analogue: 12 bit
Bandwidth	0.05 to >30Hz	0 to >30Hz
Data output rate	Digital: up to 200 Hz; Analogue: up to 500Hz (with an external repeater)	
Dimensions	99mm (d) x 172mm (h) (excluding connector and mounting plate)	
Weight	<2.3Kg (3.5Kg with 5m length of cable)	
Power supply	15-30 Vdc	
Temperature range	0 to 55°C operating; -20 to 70°C storage	
Power requirement	10-36V, <6.5W	
Depth rating	3000m	
Shock (survival)	30g peak 40ms half-sine	
Vibration (operating)	30mm/s or 0.2mm, 7-300Hz	
Available output formats	DMSView for Windows offers standard TSS and other manufacturers' data strings in addition to a user-configurable menu	
Software interface	Digital: RS232 or RS422 (software selectable); Analogue: via an optional remote interface for power, communications and aiding	
MTBF (computed)	50,000 hours	
<b>WORK STATION (optional)</b>		
Size overall	375 x 285 x 104mm	
Weight	5.2 Kg	
Display type	TFT colour LCD, size 12.1 inches	
Maximum resolution	800 x 600 pixels	
Power supply	85 to 265V AC (47 to 63 Hz) 80W	
Ports	4 serial, 1 parallel	
Temperature range	0 to 45°C	
Warranty	12 months international warranty for parts and labour.	

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

WORLD LEADERS IN MARINE NAVIGATION



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