

DMS-500RP

DYNAMIC ROLL/PITCH SENSORS

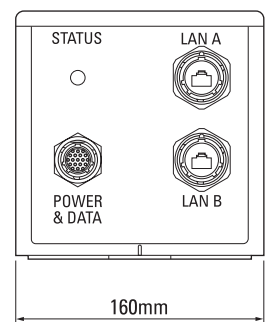
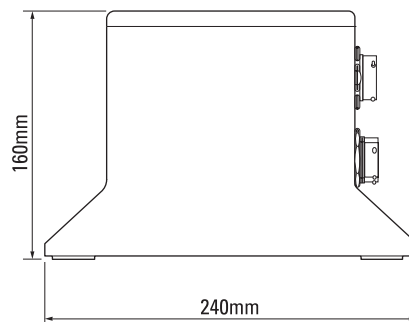
Accurate Roll & Pitch data for any motion measurement application.

The DMS-500 is an evolving range of marine surface motion sensors, based upon the highly reliable and proven DMS series, from the world leaders in Marine Instrumentation. The DMS-500 series of motion sensors has been developed to provide a cost-effective, accurate solution to motion measurement for a variety of applications. The first phase of the product launch introduces the Roll Pitch range of sensors – DMS-525RP, DMS-535RP and DMS-550RP.

The solid state angular rate sensors employed offer reliability and, together with a complementary blending algorithm, provides a high performance vertical reference unit. The sensors can be supplied in various configurations for bespoke applications. As with all TSS systems, the DMS-500RP series is designed to meet all current and anticipated European legislation for electromagnetic compatibility and electronic emissions.

Features:

- Dynamic Roll/Pitch accuracies from 0.25° to 0.50° RMS
- Solid state solution provided in a surface housing
- Water resistant to IP65 (International Standard IEC 60945 Class B for marine applications)
- High dynamic accuracy during vessel turns
- Power and data over Ethernet
- Two independently configurable serial outputs
- Low cost, low power
- Compact and lightweight
- High reliability – MTBF >50,000 hours
- Complies with IEC 60945
- 1 year international parts and labour warranty
- 24 hour, 365 days/year technical support



WEIGHT APPROX 4Kg



DMS-525RP/-535RP/-550RP

TECHNICAL SPECIFICATIONS

	DMS-525RP	DMS-535RP	DMS-550RP
Dynamic accuracy	0.25°RMS	0.35°RMS	0.50°RMS
Maximum range	±30°		
Data resolution	0.01°		
Bandwidth	0 to 25Hz		
Data output rate	0 to 50Hz		
Available output parameters	<ul style="list-style-type: none"> • Adjustable data packet output rate down to 1Hz • Roll and pitch • Angular rate X, Y, Z • Acceleration X, Y, Z (body frame) • Sensor status 		
Dimensions	160mm x 160mm x 160mm (240mm max width at base)		
Weight	4Kg		
Power supply	18-36 VDC (24 VDC nominal)		
Power requirement	10W		
Temperature range (operating)	-15°C to +55°C		
Depth rating	None		
Waterproof rating	IP65		
Shock (survival)	30g peak 40ms half-sine		
Vibration (operating)	to IEC 60945		
Available output formats	Standard TSS and other manufacturers' data strings		
Ethernet	Packet O/P via TCP, UDP or UDP multicast Dual redundant interfaces Power over Ethernet (802.3af)		
MTBF	Solid state components >50,000 hours. Bi-annual calibration recommended.		
Scope of supply	Motion sensor, power/data cable (3m); Ethernet mating-half connector (2 off); manual on CDROM; mounting template; cardboard packing case.		
Export Compliance	No licence required (US 7A994)		
Quality	ISO9001:2008 Certificate number LRQA0962337 (UK manufacture & service only)		
Warranty	12 months international warranty including parts and labour. Extended warranty available on request.		

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



TELEDYNE TSS
A Teledyne Technologies Company

Head Office:
1 Blackmoor Lane,
Croxley Green Business Park,
Watford, Hertfordshire
WD18 8GA, UK
Tel: +44 (0)1923 216020
Fax: +44 (0)1923 216061
Email: tsssales@teledyne.com

Aberdeen:
10 The Technology Centre,
Aberdeen Science & Energy Park,
Claymore Drive, Bridge of Don,
Aberdeen AB23 8GD, UK
Tel: +44 (0)1224 707081
Fax: +44 (0)1224 707085
Email: tsssales@teledyne.com

Houston:
Hammerly Blvd,
Suite 128,
Houston TX 77043, USA
Tel: +1 713 461 3030
Fax: +1 713 461 3099
Email: tssussales@teledyne.com