Meridian Subsea

Gyrocompasses

Exceptional performance and accuracy

The Meridian Subsea uses a Dynamically Tuned Gyro (DTG) element, which provides exceptional performance and accuracy and removes the need for routine maintenance, significantly reducing cost of ownership.

The high accuracy heading output can be maintained for turn rates in excess of 200° per second making the system ideal for operation in even the most hostile subsea environments.

The design of the Meridian Subsea is simple yet highly robust and the fast settle time of less then 45 minutes allows for vastly increased efficiencies over earlier mechanical gyro technologies.

The Meridian Subsea may be upgraded to the Subsea RP with addition of a Roll and Pitch Module. This enables output of roll and pitch data with up to 0.1° accuracy making the unit useful in a wider variety of subsea control, installation or monitoring applications.

Also optional in either the Subsea or Subsea RP models is the addition of an integral battery back-up module. This can cover short-term power supply loss and power supply switch over.

PRODUCT FEATURES

- Maintenance-free DTG element
- Dynamic heading accuracy of ±0.3° (RMS secant latitude)
- <45 minutes settling time
- Low power requirement
- Low cost of ownership
- MTBF of 30,000 hours
- Depth rated to 3000m
- Very high turn rate of 200° per second
- Configuration via PC interface S/W
- Optional integral Roll & Pitch module with battery back-up

TELEDYNE TSS
Everywhereyoulook™

A Teledyne Marine Company

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TECHNICAL SPECIFICATIONS

Heading	Settle point	0.25° secant latitude
	Static accuracy	<0.1° RMS secant latitude
	Dynamic accuracy	<0.3° secant latitude (Scorsby and Intercardinal motion tests)
	Follow up speed	200°/sec
	Settling time	<45 minutes to within 0.70°, from initial 30° offset
Latitude input	Automatic – via RS232 or RS422, NMEA 0183 from SDC software	
Speed input	Automatic – via RS232 or RS422, NMEA 0183 from SDC software	
Latitude compensation	80°N to 80°S	
Speed compensation	0 – 20 knots	
Operating temperature	0° to +45°C (-15° to 55°C with reduced accuracy)	
Storage temperature	–25°C to +80°C	
Gimbal limits	±45° pitch and roll	
Shock survival	10g	
Mean time before failure	>30,000 hours	
Input voltage	24Vdc (18-36Vdc)	
Start-up current	~1.8A	
Dimensions	215mm (dia) x 516mm (h)	
Weight	28.6Kg in air 6.5Kg in water	
Depth rating	3000m	
Accessories included	Operators handbook, transit case, spare connectors	
Standards	BS EN 60945, BS EN ISO 8728 1994, CE Marking, Electromagnetic Compatibility (EMC) Directive	

OPTIONS

Roll & Pitch Module	Accuracy 0.1° or 1% whichever is greater, update rate 50 Hz, TSS1 or HHRP output formats
Battery Back-up Module	Internal auto-recharging batteries giving up to 1 minute back-up power supply
Warranty	12 months international warranty including parts and labour.

COMPANY WITH MANAGEMENT SYSTEMS CERTIFIED BY DNV
= ISO 9001 =
= ISO 14001 =

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