

Meridian Surveyor Gyrocompass

The world's smallest digital marine gyrocompass, the Meridian Surveyor has been designed to be the lightest, most flexible and accurate mechanical gyrocompass available. The unit utilises a DTG gyro element, which provides exceptional performance with an accuracy unmatched by even the latest fibre optic designs. Unlike conventional spinning mass gyrocompasses, the Meridian Surveyor uses a dry tune element (DTG) that removes the need for routine maintenance thereby significantly reducing cost of ownership.

The Meridian Surveyor provides reliable, maintenance free operation with a MTBF in excess of 30,000 hrs. The remarkably stable heading can be maintained for turn rates in excess of 200 ° per second making the system ideal for use on fast survey craft and in river/harbour environments.

FEATURES AND BENEFITS

- MTBF of 30,000 hrs
- <40 minutes settling time
- Maintenance free DTG element
- IMO, Wheelmark & HSC certified
- High turn rate of 200 ° per second
- Static heading accuracy of $\pm 0.05^\circ$
- Dynamic heading accuracy of $\pm 0.2^\circ$
- Start up power requirement of 1.8A
- User friendly digital set-up and self-test
- World's smallest & lightest marine gyro
- Gyro element design ensures low cost of ownership
- Comprehensive range of analogue & digital output options
- A wide range of interfaces to enable use on any marine vessel
- Innovative chassis design incorporating state-of-the-art digital electronics for improved reliability



TECHNICAL SPECIFICATION

Display type	360 ° Compass Card and VFD Display	Dimensions	344mm (H) x 267 mm (W) x 440mm (D)
Settle point	0.1 ° secant latitude	Weight:	15.5kg
Static accuracy	0.05 ° RMS secant latitude	Accessories Incl.	Operators Handbook, Spare Fuse, Connector Kit
Dynamic accuracy	0.2 ° secant latitude	Options	Transit Case, Repeater, 110/220V Power Supply Unit
Follow up speed	200 °/sec.	Standards	IMO A 424 (X1), IMO A 821 (1bv9), BS EN 60945, BS EN ISO 8728. 1994, BS 6217. 1981 CE Marking, Electromagnetic Compatibility (EMC) Directive and the Marine Equipment Directive 96/98/EC
Settling time	<40 minutes, to within 0.7 °	Warranty	12 months parts and labour international warranty
Latitude Input	Automatic - via RS232 or RS422, NMEA 0183 from GPS or Manual	Outputs Format	
Speed Input	Automatic - via RS232 or RS422, NMEA 0183 from Log, or pulse / contact closure at 100, 200 or 400 per NM from Log or manual	"S" type	Step by Step (5V TTL) 6 steps/10
Latitude Compensation	80 °N to 80 °S	Synchro	1 x 26V, 400Hz, 360 ° (1:1 ratio) 11.8V line to line
Speed Compensation	0 - 90 knots	Serial Data	5 x RS 422 5 x RS 232 5 x 20mA loop
Operating Temperature	-15 °C + 55 °C	Analogue	R.O.T. $\pm 20^\circ$ /sec. (± 10 mA) 1 x 5V TTL system ready 1 x 5V TTL power fail / gyro fail
Storage Temperature	-25 °C to + 80 °C		
Gimbal Limits	$\pm 45^\circ$ Pitch and Roll		
Shock	10g		
Mean Time Between Failure	30,000 hours		
Service intervals	No scheduled maintenance, Calibration recommended every 2 years		
Input Voltage	24VDC (18 - 36VDC)		
Start up current	1.8A at Switch on		

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