SGB2000

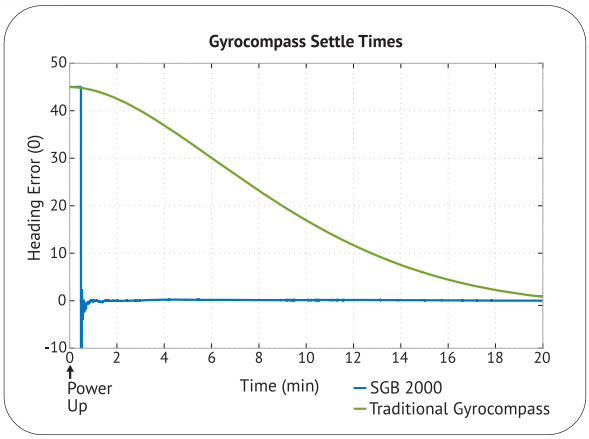
Solid State Gyrocompass

A high performance solid state gyrocompass

With more than 100 years of experience in navigation technology, Teledyne TSS Ltd has produced a gyrocompass that meets the needs of customers requiring a cost-effective primary navigation solution. With no moving parts and no regular maintenance required, the SGB2000 offers a real alternative to mechanical gyrocompasses with low through life costs. The SGB2000 has been designed to satisfy the demand for a rugged, high performance solid state gyrocompass by using high grade inertial sensing elements with exceptionally high MTBF.

The SGB2000 has a flexible interface allowing easy connectivity to existing ships systems. A comprehensive range of repeaters are available from Teledyne TSS to complement the SGB2000.

The extremely accurate and stable heading can be maintained during turns of up to 200 degrees per second making the system ideal for use on fast survey craft and in river/harbour environments. The SGB2000 is available in both surface and subsea housings allowing the unit to be used in a range of environments and applications.



PRODUCT FEATURES

- Maintenance free ring laser gyros and accelerometers with MTBF in excess of 300,000 hours
- Latitude and speed corrected
- 3000m subsea housing available with horizontal or vertical mounting for ROV and subsea structure mounting
- Multiple configurable I/O channels
- Fast settling time
- Low power consumption

TELEDYNE TSS
Everywhereyoulook™

A Teledyne Marine Company

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TECHNICAL SPECIFICATIONS

Heading	Dynamic accuracy		<0.25° RMS secant latitude
	Settling time		<30 minutes to within 0.70°
	Data latency		<3 ms
	Resolution		0.01° (or as dictated by O/P packet format)
Roll and Pitch	Dynamic Accuracy		0.025° RMS
	Range		-90° <pitch <+90°, -180° <roll ≤180°
	Limits		None
	Axis alignment		<0.005°
	Data latency		<3ms
	Resolution		0.01°
Data Parameters	Serial outputs		3 configurable I/O Channels
	Data protocols		RS232 and RS422
	Data output rate		Up to 200Hz
	Baud Rate		1200 – 115,200
	Data Bits		7 or 8
	Stop Bits		1 or 2
	Parity		None, even or odd
	Data output formats		TSS1, TSS HHRP, TSS1 + NMEA HDT, TSS3, Simrad EM1000, Simrad EM3000, Atlas, NMEA PRDID, BMT1, Polled, User configurable
Aiding	GPS		NMEA 0183 GGA and VTG
Environmental	Ambient operating temperature		-15°C to +55°C (operating), -20°C to +70°C (storage)
	Shock (survival)		10g
	Housing:	Surface	IP65 rated, aluminium
		Subsea 3000m	Aluminium
Physical	Dimensions:	Surface	380mm (l) x 240mm (w) x 183mm (h) (including connectors)
		Subsea	235 (d) x 350mm (h) (including handles & connectors)
	Weight:	Surface	13Kg
		Subsea	20Kg in air; 6.5Kg in water
Electrical	Power requirement		18-36Vdc 20W
Regulatory Approval	CE		
MTBF	System		>30,000 hours
	RLGs and Accelerometers		>300,000 hours
Warranty	12 months international warranty including parts and labour.		

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

TELEDYNE TSS
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www.teledyne-tss.com

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
7701 West Little York, Suite 300,
Houston, TX 77040, USA
Tel: +1 713 461 3030
Fax: +1 713 461 3099
Email: tsssales@teledyne.com