

# CDL TOGS

## Tiny Optical Gyro System

The CDL Tiny Optical Gyro System (TOGS) is a low cost fibre optic gyro (FOG) based North seeking compass for use on surface marine vessels and remotely operated vehicles (ROVs).

The extremely small size of the unit allows the system to be used in many underwater applications where space is at a premium. CDL TOGS rapidly settles on its full heading accuracy of  $0.5^\circ$  secant latitude RMS within 10 minutes. CDL TOGS also provides pitch and roll outputs to accurately track these aspects of vessel or ROV motion.

Housing options include 3000m and 4000m aluminium subsea as well as a 6000m titanium subsea version. Also available as an IMO approved surface gyro (CDL TOGS-S).



### PRODUCT FEATURES AND BENEFITS

- Low cost
- Small size
- Lightweight
- Optical technology (FOG) - no moving parts
- Pitch and roll
- Depth sensor option
- Sound Velocity sensor option
- Fast north seeking



**TELEDYNE TSS**  
Everywhereyoulook™

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### TECHNICAL SPECIFICATIONS

		3000m Aluminium	4000m Aluminium	6000m Titanium
Performance	Heading accuracy	0.5° secant latitude RMS		
	Roll & pitch accuracy	0.1° RMS		
	Heave accuracy	N/A		
	Alignment time	<10 minutes		
	Angular rate	+/- 300°/s		
	Operating latitude	+/- 70°		
	Position	Free inertial drift	N/A	
DVL aiding		N/A		
GPS aiding		N/A		
USBL & LBL aiding		N/A		
Power	Power supply	18 - 30Vdc		
	Power consumption	12 - 16W		
Interface	4 software configurable ports			
	RS-232 / RS-422 / RS-485			
	Ethernet (optional)			
Physical Characteristics	Dimensions	175mm (d) x 244mm (h)	187mm (d) x 262mm (h)	187mm (d) x 262mm (h)
	Weight in air	10.6kg	13.5kg	16.0kg
	Weight in water	4.8kg	6.5kg	10.0kg
	Rating	3000m	4000m	6000m
Environmental and EMC	Operating temperature	-5°C to +40°C* (untested)		
	Storage temperature	-40°C to +80°C		
	Environmental	N/A		
	EMC	N/A		
	MTBF	N/A		
Options	Integrated IPS depth sensor			
	Integrated SVS sound velocity sensor			
	Deck cable (25m standard)			
	Spares kit			
Compliance	Standards	N/A		
	Export	UK	ECCN 7A0003d	
		USA	ECCN 7A994	
Warranty	12 months international warranty including parts and labour			

COMPANY WITH  
MANAGEMENT SYSTEMS  
CERTIFIED BY DNV  
= ISO 9001 =  
= ISO 14001 =  
= OHSAS 18001 =

Specifications subject to change without notice.  
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