



OceanTools

C-FOG

Compact Fibre Optic Gyrocompass

C-FOG is an ultra-compact and cost-effective survey grade subsea fibre optic gyrocompass and inertial measurement unit with up to 0.35° heading accuracy.



Overview

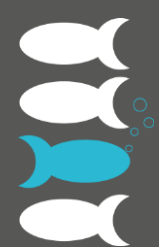
The newly developed OceanTools **C-FOG** is a highly accurate survey grade gyrocompass with a heading accuracy of up to 0.35° (depending on Latitude) and pitch & roll accuracy of 0.05° .

C-FOG utilises the latest generation of fibre-optic gyrocompasses and MEMS accelerometers along with advanced processing electronics housed in a very compact subsea housing.

C-FOG may be used in a wide variety of predominantly static subsea and surface applications including subsea survey, ROV and AUV orientation.

Key Features

- Outputs heading, pitch, roll and optional rate information
- Simultaneous twin serial outputs
- Rapid 5 minute run-up time
- RS232 and RS485 outputs
- 500m, 1000m and 3000m standard depth ratings
- Never requires recalibration



Specifications

| | C-FOG 500A | C-FOG 1000A | C-FOG 3000A | C-FOG 3000T |
|--|---|-------------|-------------|-------------|
| Heading accuracy | ≤ 0.35° secant Latitude (RMS) | | | |
| Pitch & roll accuracy | ≤ 0.05° (RMS) | | | |
| Bias instability (Allan variance) | ≤ 0.05°/h | | | |
| Bias repeatability (1σ) | ≤ 0.1° | | | |
| Alignment time | 5 minutes | | | |
| Housing material | Aluminium | Aluminium | Aluminium | Titanium |
| Diameter | 200mm | 203mm | 215mm | 203mm |
| Height (excl handle) | 178mm | 185mm | 212mm | 185mm |
| Weight in air | 7.5kg | 10kg | 17kg | 15kg |
| Weight in water | 2kg | 4kg | 9.5kg | 9kg |
| Depth rating | 500m | 1000m | 3000m | 3000m |
| Serial interfaces | RS232, RS485 | | | |
| Output formats | OceanTools OceanFOG, MiniFOG, third party message formats | | | |
| Output rates | 1Hz to 50Hz | | | |

Related Products

An **OceanFOG** gyrocompass generates real-time heave and linear acceleration measurements in addition to survey grade heading, pitch, roll and angular rotation rates.

Gyro Survey Packages offer heading, pitch, roll, azimuth and angle from a gyro packaged in a standard or custom designed deployment frame to suit a wide range of *attitude* or *verticality* measurement applications. A typical package includes an **OceanDISP** subsea display, **C-Switch** master on/off switch and optional **Digiquartz** pressure/depth sensor.