# OCEANTOOLS

Innovative Products & Solutions for use in some of the world's harshest environments

## OceanFOG Subsea, Surface and ROV Gyrocompass

**The OceanTools OceanFOG is an Inertial Reference System (IRS) based on latest-generation fibre optic gyrocompasses (FOGs) and micro-mechanical (MEMS) accelerometers in a single, compact, package. The OceanFOG provides highly accurate Heading, Pitch, Roll, Heave, Rate, Acceleration and Geographical Position. OceanFOG is available in several variants:**

- **OceanFOG-3K Horizontal housing**
- **OceanFOG-S Surface Gyro**
- **OceanFOG-R RovFOG**

OceanFOG may be used in a wide variety of subsea and surface applications including Survey, ROV navigation, AUV navigation and for Metrology applications.

When used in static survey operations OceanFOG does not require any external latitude inputs. If used on a moving vessel then a GPS derived external latitude will be required.

OceanFOG features a rapid realignment mode. If the unit has not been moved significantly from it's last location then re-alignment will be completed within 90seconds.

OceanFOG has two output datastreams: one is a "Simple" RS232 output that is non-adjustable and which can be used to configure the "Flexible" output. The "Flexible" output is user-selectable between RS232 and RS485.

### KEY FEATURES

**Outputs heading, pitch, roll, heave, latitude, longitude, rates & accelerations**

**Simultaneous twin serial outputs**

**Rapid run-up time**

**RS232 and RS485 outputs**

**3000m standard depth rating for subsea versions**

**Never requires recalibration**

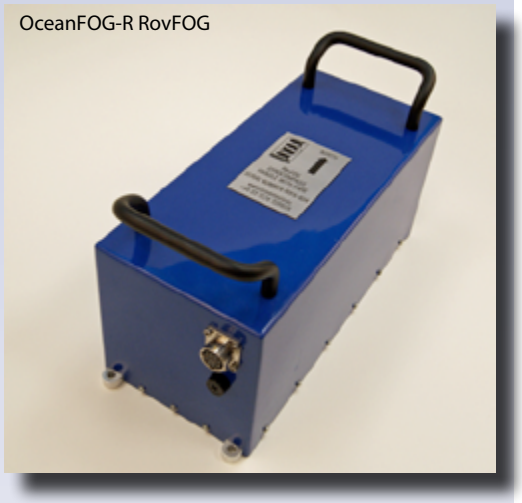

THE BRITISH ASSESSMENT BUREAU ISO9001

# OCEANTOOLS

Innovative Products & Solutions for use in some of the world's harshest environments

## SPECIFICATIONS

| | |
|---|---|
| Heading accuracy, typical | better than 0.1° x sec lat |
| Pitch & Roll accuracy, typical | better than 0.01° |
| Pitch & Roll measurement range | ±180° |
| Heave accuracy, worse case | 0.1m |
| Heave accuracy, typical | 0.05m |
| Heave measurement model | True heave, |
| Acceleration accuracies | 0.2mS$^2$ |
| Static alignment time, latitude <45° | <3min |
| Static alignment time, latitude >45°<78° | <10min |
| Dynamic alignment time | <30min |
| Operating voltage range | 18-36VDC |
| Power consumption | <30Watt |
| Interfaces | RS232, RS485 |
| Interface protocol | OceanTools OceanFOG, MiniFOG, various others |
| Update rates | Up to 50Hz |
| Operating temperature range | -15°C to 55°C |
| Maximum operational shock | 6g for 11mSec in 3 axes |
| MTBF | >20000hours |
| Maximum latitude | 78°N/S |
| Length (3000m) | 390mm |
| Diameter (3000m) | 205mm |
| Weight in air (3000m) | 19kg |
| Weight in water (3000m) | 7kg |
| Depth ratings | 3000m standard |
| Depth options | 300m - 6000m |
| Data transmission | RS232, RS485 |



OceanFOG-R RovFOG


**OceanTools Ltd**
**OceanTools House**
**Claymore Drive**
**Aberdeen AB23 8GD. UK.**

**Tel** + 44 1224 709606
**Fax** + 44 1224 709616
**Email** sales@oceantools.co.uk
**Web** www. oceantools.co.uk


**Represented by:**