



Buoy Compass

S1009

- **No moving parts**
- **Instantaneous readings**
- **No damping necessary**
 - **Very rugged**

The fluxgate compass is a microprocessor controlled, gimballed fluxgate compass, which has been designed for navigation systems and other remote compass measurements, where high vibration, shock, and temperature extremes are common.

The compass element is a coil which senses the magnetic flux of the earth's magnetic field. An integral circuit converts the coil output to digital signals, which indicate the compass heading relative to magnetic north. The gimballs are the only moving parts in the compass, and allow the compass to be accurate at tilt angles up to +/- 30°.

For buoy applications, the compass is uniquely mounted and isolated from all mechanical and electrically created magnetic fields.

The compass is recalibrated for the specific hull configuration to give the maximum accuracy. The resultant offsets are entered into the ZENO®. Special testing is also done to verify the tilt accuracy limits.



Technical Specifications

S1009

Measurement

Operating Voltage:	12 VDC, +/- 30%
Operating Current:	Typically 30 mA
Accuracy:	+/- 1° (at 25°, 0° heel)
Resolution:	0.1° (1° in N + 1 format)
Gimballing:	+/- 45
Variation:	Programmable 99° E to 99°W
Deviation:	Auto-calibration mode or manual entry of correction for 8 points

Environmental

Temperature Range:	-20°C to +70°C
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PHYSICAL

Weight:	25 g (0.875 oz)
Interconnection:	4 core cable with weatherproof connector to unit