



SWALE OCEANOGRAPHIC

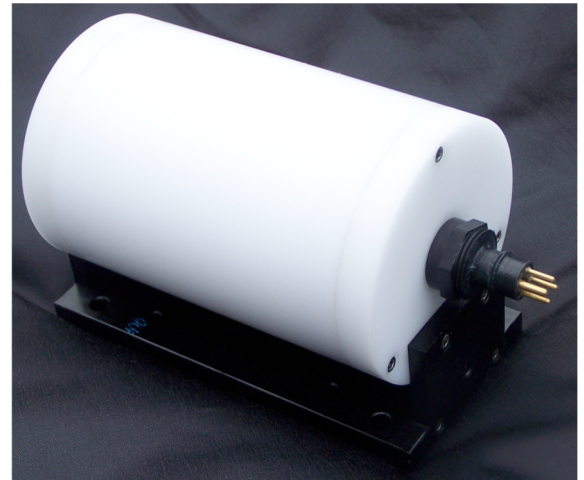
MRU-100

4 AXIS Motion Reference Unit

Also available for Inertial Navigation (MRU-500)

This is more than just an Attitude sensor and Accelerometer. The MRU-100 is designed to accurately measure pitch, roll, heading and heave in surface and underwater applications under static and dynamic conditions using gyro compensation.

The MRU-100 can be mounted on marine vessels, ROVs (remotely operated vehicles), and AUVs (autonomous underwater vehicles) to help support your mission objectives such as sonar surveys, imaging sonar compensation, attitude measurement and orientation.



The MRU-100 motion reference unit is the new leader in its class to give you:

- Gyro compensated pitch, roll, heading and heave output for operations in static and dynamic conditions
- Output string modified to your specification
- Installation in any orientation
- Magnetic interference detection
- Optional pressure / temperature sensors
- High Accuracy version Meets IHO Standard SP1 Data output

Pitch

Roll

Heading

Heave

FEATURE	SPECIFICATION
Size	89 mm DIA x 152 mm L
Material	Anodized aluminium cylinder with mounting plate (Delrin housing also available)
Weight	1.2 kg (aluminium) in air, 0.3 kg (aluminium) in water
Depth Rating	3300 m (aluminium) 900 m (Delrin)
Power	7 VDC to 36 VDC reverse polarity protected
Communication	RS-232, RS-485, RS-422
Connector	4 pin LSG-4-BCL connector (others available upon request)
Maximum rotation rate	Selectable +/- 150 deg/sec, +/- 300 deg/sec
Maximum acceleration	+/- 5 g
Magnetometer range	+/- 2.5 gauss
Pitch / Roll Accuracy	0.2 ° RMS Note that the orientation and heave accuracy depends on the application and the environment that the sensor is operating in (i.e. vibration, dynamic motion and etc.).
Heading Accuracy	1.0 ° RMS typical for most conditions under ideal magnetic conditions 0.05 ° RMS
Pitch / Roll Accuracy (High Accuracy option)	Note that the orientation and heave accuracy depends on the application and the environment that the sensor is operating in (i.e. vibration, dynamic motion and etc.).
Heave Accuracy	5 cm if heave is less than 1 metre, 5% if heave is greater than 1 metre
Heave Resolution	1 cm
Options	Pressure & Temperature sensors, Internal memory and battery power

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