

ImpactSubsea

Innovative Underwater Products

ISM3D – Heading, Pitch & Roll Sensor



Impact Subsea is proud to present the ground breaking **ISM3D** family of **Underwater Attitude and Heading Reference System (AHRS) Sensors**. Highly robust, compact and lightweight sensors providing **Heading, Pitch and Roll**.

The ISM3D utilises MEMS based Accelerometers, Angular Rate Gyroscopes and Magnetometers.

The outputs from each sensor are processed by an advanced fusion algorithm to provide highly **stable and accurate** Heading, Pitch and Roll.

The **ISM3D** is provided in a highly robust Titanium or Delrin® housing. Alternative OEM configurations are available upon request.

Features

Heading

Pitch & Roll

Titanium Housing

Optional Delrin Housing

SeaView Software

Emulate Any Device

Benefits

Provides Heading to $\pm 0.5^\circ$ of Local Magnetic North

Provided to $\pm 0.07^\circ$ Accuracy

Robust & Depth Rated to 6,000 Meters

Low Weight

Configure Sensor, View & Log Data

Direct Replacement of Existing Equipment

Applications

ROV & AUV Heading & Attitude

Equipment Deployment Monitoring

Motion Reference Unit (MRU)

Auto Heading

Replacement for Flux Gate Compass

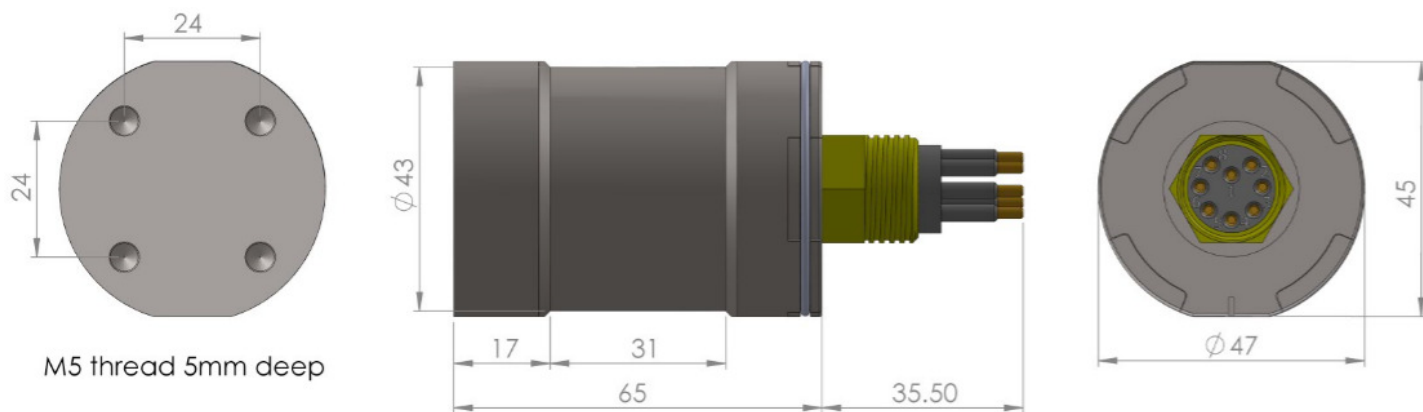
Replacement for Magnetically Slaved Gyro

www.impactsubsea.com

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Standard connector & housing shown - other connector options are available.

All dimensions are in mm.

Heading	
Accuracy	± 0.5° of Local Magnetic North
Resolution	0.1°
Communications & Power	
Digital	RS232 & RS485
Protocol	300 to 115,200 baud
Data	Continuous or on demand
Data Rate	Up to 250Hz
Input Voltage	7 to 32V DC
Power	29mA @ 24V DC

Specifications subject to change in line with product enhancements. Rev 1.1

Attitude	
Pitch	± 90°
Roll	± 180°
Accuracy	± 0.07°
Resolution	0.01°
Physical	
Weight (Air / Fresh Water)	0.33/0.225kg (Titanium) 0.20/0.10kg (Delrin®)
Depth Rating	6,000m (Titanium) 1,000m (Delrin®)
Temperature	-10 to 50° operating -20 to 70° storage
Connector	Subconn MCBH8M-SS other options available

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