

# ISM3D

## HEADING, PITCH & ROLL SENSOR



Impact Subsea are proud to present the ground breaking ISM3D family of Underwater Attitude and Heading Reference System (AHRS) Sensors.

Highly Robust, compact and lightweight, the ISM3D is ideal for ROV, AUV and other underwater Heading, Pitch and Roll applications.

With a selectable Inertial Mode, the ISM3D Heading is highly resilient against temporary magnetic interference.

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.

## FEATURES BENEFITS

Heading	Provides Heading to $\pm 0.5^\circ$ of Local Magnetic North.
Pitch & Roll	Provided to $\pm 0.07^\circ$ accuracy.
Titanium Housing	Robust & depth rated to 6,000m.
Acetal Housing*	Low weight.
seaView Software	Configure sensor, view & log data.
Emulate Any Device	Direct replacement of existing equipment.

*Provided in a highly robust Titanium or Black Acetal housing. Alternative OEM configurations are available upon request.*



## APPLICATIONS

Auto Heading  
Motion Reference Unit (MRU)  
ROV & AUV Heading & Attitude  
Equipment Deployment Monitoring  
Replacement for Flux Gate Compass  
Replacement for Magnetically Slaved Gyro

ImpactSubsea

www.impactsubsea.com

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### HEADING

Accuracy	± 0.5° of Local Magnetic North
Resolution	0.1°

### ATTITUDE

Pitch	± 90°
Roll	± 180°
Accuracy	0.07°
Resolution	0.01°

### COMMS & POWER

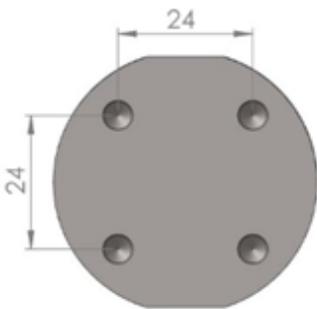
Digital	RS232 & RS485
Protocol	4800 to 115,200 baud
Data	Continuous or on demand
Data Rate	Up to 250Hz
Input Voltage	7 to 32V DC
Power	29mA @ 24V DC

### PHYSICAL

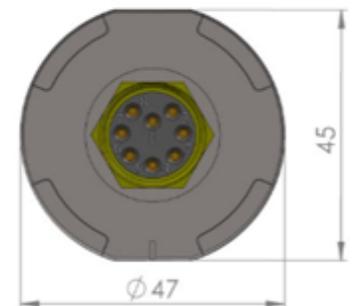
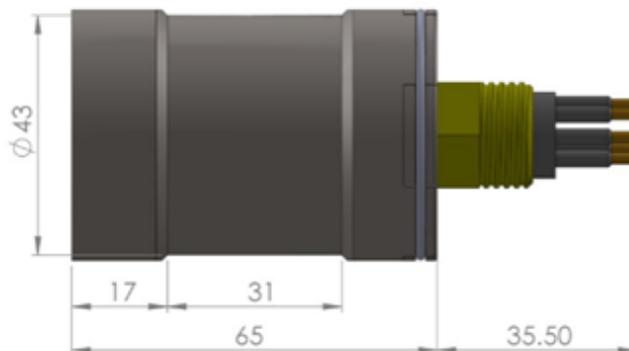
Depth Rating	6,000m (Titanium) 1,000m (Acetal)
Temperature	-10 to 50°C Operation -20 to 70°C Storage
Connector	Subconn MCBH8M-SS <i>Other options available</i>
Weight	0.33/0.225kg (Titanium) <i>Air/Fresh water</i> 0.20/0.10kg (Acetal)

### CONTACT US

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M5 thread 5mm deep



Dimensions given in mm.

\* Optional

Specifications subject to change in line with product enhancements.  
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