

ISM3D

UNDERWATER AHRS
PROVIDING HEADING, PITCH & ROLL

**IMPACT
SUBSEA**
INNOVATIVE SENSORS

FEATURES & BENEFITS

> HEADING

Provides Heading to $\pm 1^\circ$ 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 & depth rated to 1,000m.

> EMULATE ANY DEVICE

Direct replacement of existing equipment.

> SEAVIEW SOFTWARE

Configure sensor, view & log data.



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.

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



APPLICATIONS INCLUDE:

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

*Optional



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UNDERWATER AHRS PROVIDING HEADING, PITCH & ROLL



HEADING

Accuracy	$\pm 1^\circ$ of Local Magnetic North
Resolution	0.1°

ATTITUDE

Pitch	$\pm 90^\circ$
Roll	$\pm 180^\circ$
Accuracy	$\pm 0.07^\circ$
Resolution	0.01°

COMMS & POWER

Digital	RS232 & RS485
Protocol	4800 to 115,200 baud
Data	Continuous or on demand
Data Rate	Up to 100Hz
Input Voltage	7 to 32V DC
Power	45mA @ 24V DC

PHYSICAL

Depth Rating	6,000m (Titanium) 1,000m (Acetal)
Temperature	-10 to 50°C Operating -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)

