Impact Subsea is proud to present the groundbreaking ISA500 family of Underwater Altimeters. Highly robust Altimeters with optional integrated Attitude & Heading Reference System (AHRS).

The ISA500 utilises a broadband composite transducer together with an advanced digital acoustic engine to provide the highest level of stability and range available from a 500kHz Altimeter.

With an integrated AHRS, the ISA500 has the ability to compensate for pitch and roll – providing a true altitude reading at all times. For applications where Altitude, Heading, Pitch & Roll are required; all can be provided from a single device.

The ISA500 is provided in a highly robust Titanium or Delrin® housing. The housing is available in forward looking or right angle configurations. The unit can be supplied without the AHRS. Alternative OEM configurations are available upon request.

**Features**

- **120+ Meter Range**
- **1 mm Accuracy**
- **Integrated AHRS**
- **Optional Delrin Housing**
- **Multi-Echo Output**
- **Emulate Any Device**

**Benefits**

- Proven Long Range Measurement
- Proven Millimetre Accuracy
- Provides Heading to ± 1°, Pitch & Roll to 0.2° Accuracy
- Low Weight and Cost
- View all Returned Acoustic Echos – Ideal for Measuring Between Objects
- Direct Replacement of Existing Equipment

**Applications**

- ROV & AUV Altitude, Heading & Attitude
- Scour Monitoring
- Hydro-graphic Survey
- Touchdown Monitoring
- Wave Height Measurement
- Under Ice Measurement
- Equipment Deployment
- Motion Reference
- Underwater Positioning

www.impactsubsea.com
**Acoustic**

| Frequency          | 500kHz Standard  
|                   | 400 to 600kHz Selectable  
| Range             | 0.1 to 120m  
|                   | (Maximum range dependant on seabed type)  
| Resolution        | 1mm  
| Beam Angle        | 6° conical at 500kHz  
| Signalling        | Monotonic  
| Pulse Length      | Auto/User Defined  

**Communications & Power**

| Digital           | RS232 & RS485  
| Protocol          | 300 to 115,200 baud  
| Analogue          | 0 to 5V DC, 0 to 10V DC  
|                   | or 4-20mA  
| Data              | Continuous or on demand  
| Data Rate         | Up to 10Hz  
| Input Voltage     | 9 to 36V DC  
| Power (No Altitude)| 25mA @ 24V DC  
| Power (With Altitude)* | 51mA @ 24V DC  

| Forward Looking Housing |  
| Right Angle Housing    |  

Specifications subject to change in line with product enhancements. Rev 2.2

**Heading**

| Accuracy   | ± 1°  
| Resolution | 0.1°  

**Attitude**

| Pitch      | ± 90°  
| Roll       | ± 180°  
| Accuracy   | ± 0.2°  
| Resolution | ± 0.1°  

**Physical**

| F/L: Weight (Air / Fresh Water) | 0.5/0.325kg (Titanium)  
|                                   | 0.3/0.110kg (Delrin®)  
| R/A: Weight (Air / Fresh Water) | 0.520/0.350kg (Titanium)  
|                                   | 0.325/0.125kg (Delrin®)  
| Depth Rating                      | 4,000m (Titanium)**  
|                                    | 1,000m (Delrin®)  
| Temperature                       | -10 to 40° operating  
|                                    | -20 to 60° storage  
| Connector                         | Subconn MCBH8M-SS  
|                                    | other options available  

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* 100% Tx power, 10Hz update rate.  
** 6,000m rated option available

**Contact Information**

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