## Technical Specifications

### General

**Operating Depth**
- Delrin: 200 m
- Aluminium Alloy: 1000 m
- Stainless Steel: 2000 m
- Titanium: 6000 m

**Operating Range**: 6000 m

**Frequency Band**: 13 - 24 kHz

**Transducer Beam Pattern**: Directional, 70 degrees

**Slant Range Accuracy**
- 1) 0.01 m

**Bearing Resolution**: 0.1 degrees

**Nominal SNR**: 10 dB

### USBL

**SLANT RANGE ACCURACY**
- 1) 0.01 m

**Bearing Resolution**: 0.1 degrees

**Nominal SNR**: 10 dB

**Acoustic Connection**: up to 9.2 kbit/s

**Bit Error Rate**: Less than 10^-10

**Internal Data Buffer**: 1 MB, configurable

**Host Interface**
- Ethernet, RS-232 (RS-485/422*)

**Interface Connector**: Up to 2 SubConn® Metal Shell 1500 Series

### Consumption

**Stand-by Mode**: 2.5 mW

**Listen Mode**
- 5 - 285 mW
- Less than 1.3 W

**Receive Mode**
- 2.5 W, 1500 m range
- 5 W, 3000 m range
- 15 W, 6000 m range
- 40 W, max. available

**Power Supply**
- External 24 VDC (12 VDC*) or internal rechargeable battery*

### Dimensions

**Housing/USBL sensor**
- Ø 113 mm x 220 mm / Ø 175 mm x 145 mm

**Total Length**: 365 mm

### Weight

**Dry/Wet**
- Delrin: 8500 / 4230 g
- Aluminium Alloy: 9800 / 5300 g
- Stainless Steel: 13040 / 9540 g
- Titanium: 13420 / 8920 g

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* Specifications subject to change without notice. © EvoLogics GmbH - June 2012

**Simultaneous** positioning and communication

**S2C Technology**: accurate 3D positioning and reliable data transmissions with up to 9.2 kbit/s

Directional beam pattern, optimized for vertical and slant channels

Depth rated device with low power consumption - ideal for long-term deployment
APPLICATIONS

Positioning, navigation and communication for deep-sea AUVs and ROVs
Seafloor observatories
Underwater acoustic sensor networks

CONFIGURATION OPTIONS

<table>
<thead>
<tr>
<th>HOUSING</th>
<th>DELRIN</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Plastic non-magnetic corrosion-resistant housing for short-term deployments, depth rating 200 m</td>
</tr>
<tr>
<td>ALUMINIUM ALLOY</td>
<td>Light metal housing for short-term deployments, depth rating 1000 m</td>
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<tr>
<td>STAINLESS STEEL</td>
<td>Robust metal, suitable for long-term deployments in harsh environments, depth rating 2000 m</td>
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<tr>
<td>TITANIUM</td>
<td>Corrosion resistant, suitable for long-term deployments in harsh environments, depth rating 6000 m</td>
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<table>
<thead>
<tr>
<th>INTERFACE</th>
<th>1 CONNECTOR</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>RS-232 1) or</td>
</tr>
<tr>
<td></td>
<td>Ethernet</td>
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<tr>
<td></td>
<td>2 CONNECTORS</td>
</tr>
<tr>
<td></td>
<td>RS-232 + RS-232 or</td>
</tr>
<tr>
<td></td>
<td>RS-232 + Ethernet</td>
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<table>
<thead>
<tr>
<th>MODULES</th>
<th>WAKE-UP MODULE 2)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>RS-232 interface ✓</td>
</tr>
<tr>
<td></td>
<td>Ethernet interface ×</td>
</tr>
<tr>
<td></td>
<td>RS-232 + RS-232 interface ✓</td>
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<tr>
<td></td>
<td>RS-232 + Ethernet interface ×</td>
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<tr>
<th>MODULATIONS</th>
<th>ROLL, PITCH, HEADING 3)</th>
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<tr>
<td></td>
<td>internal AH-Subsystem, Xsens® MTx</td>
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</table>

1) One RS-232 interface can be replaced with either RS-485 or RS-422 interface. More interface configurations available by special request. Contact EvoLogics for more information.
2) The Wake-Up Module turns the rest of the device on if it detects incoming acoustic signals or incoming data on the host interface. Once the device completes receiving or transmitting data, it switches itself off.
3) Power consumption increases by 400 mW with an AH-Subsystem installed.

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