The SeaBat T50-R is the newest addition to the leading SeaBat T-series product range, engineered from the ground up to evolve with your business. Combined with a very compact Rack-mounted Sonar Processor (RSP), the SeaBat T50-R produces unprecedented clean data, providing faster operational surveys and reduced processing time.

The SeaBat T50-R is fully frequency agile from 190 to 420kHz, allowing for improved swath performance and reduced survey time under challenging acoustic conditions.

The Rack-mounted Sonar Processor comes with an optional industry leading fully integrated Inertial Navigation System for accurate sensor time tagging and motion stabilization.

The SeaBat T50-R is designed for very fast mobilization on any type of survey vessels, securing minimal interfacing and low space requirements.

**SeaBat T50-R standard configuration**

**Rack-mounted Sonar Processor (RSP)**
- Single point for all cable connections – for fast mobilization
- Accurate sensor time tagging and motion stabilization from the optional integrated INS
- 25m cable configuration
- 2U form factor in standard 19” rack

**SeaBat T50 sonar head assembly**
- 190-420kHz wide-band sonar arrays
- Lightweight sonar bracket
- Robust titanium housing
- Less than 8kg in water

**Extended range option**
- Replace the standard projector with the TC2187 Extended range projector to achieve 900m range performance maintaining an impressive 1.5° high resolution beam width.
- In shallow water the TC2187 projector increases shallow water resolution to an unprecedented 0.5°×0.5°.

**PRODUCT BENEFITS**
- All-in-one, fully flexible and fully integrated survey system
- The compact system allows for fast mobilization, minimal interfacing and extremely low space requirements
- Unprecedented clean and ultrahigh data quality for faster operational surveys and reduced processing time
- Fully frequency agile from 190 to 420kHz, allowing for improved swath performance and reduced survey time under challenging conditions
- The new compressed water column data significantly reduces data volume while maintaining the required information
- Normalized backscatter designed for accurate, reliable and repeatable seabed classification
- Three-year standard warranty
**SEABAT T50-R SYSTEM SPECIFICATIONS**

### T50-R scope of supply
- Receiver EM7218
- Projector TC2181
- Rack-mounted Sonar Processor
- 25m receiver cable
- 25m projector cable
- Wet-end bracket
- Nuts and bolt for ease of installation
- Three-year warranty

### Optional extra features
- Integrated INS Type 20 or Type 30
- 10m, 50m or 100m cable
- Hydrodynamic fairing
- Dual-head bracket
- Teledyne RESON Sound Velocity Probes
- Teledyne RESON PDS Survey Package
- Teledyne RESON Service Level Agreements
- Normalized backscatter license
- Motion and positioning sensors
- X-Range - improves range and reduces external noise
- Multi-Detect - multiple detections for enhanced detail over complex features and water column targets
- FlexMode – increases data density where you need it most
- Extended range projector
- Full rate dual head across the entire frequency range

### Input voltage
100-230VAC 50/60Hz

### Transducer cable length
25m (standard) Optional: 10m, 50m or 100m

### Temperature (operational / storage)
- Rack-mounted Sonar Processor: -5°C to +45°C / -30°C to +70°C
- Sonar wet-end: -2°C to +36°C / -30°C to +70°C

### T50-R system specifications

<table>
<thead>
<tr>
<th>Component</th>
<th>Height [mm]</th>
<th>Width [mm]</th>
<th>Depth [mm]</th>
<th>Weight [kg/air]</th>
<th>Weight [kg/water]</th>
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<tbody>
<tr>
<td>T50 Rx (EM7218)</td>
<td>102.0</td>
<td>460.0</td>
<td>90.7</td>
<td>8.2</td>
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<tr>
<td>T50 Tx (TC2181)</td>
<td>86.6</td>
<td>93.1</td>
<td>280</td>
<td>5.4</td>
<td>3.4</td>
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<td>T50 Tx (TC2187)</td>
<td>86.6</td>
<td>93.1</td>
<td>500</td>
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<td>6.8</td>
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<tr>
<td>Rack-mounted Sonar Processor</td>
<td>88 (2U)</td>
<td>478*</td>
<td>462</td>
<td>12.3-13.8</td>
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### Teledyne Type 20/30 IMU

<table>
<thead>
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<th>Component</th>
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<tbody>
<tr>
<td>Roll/Pitch</td>
<td>0.02°</td>
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<tr>
<td>Heading</td>
<td>0.015°</td>
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<tr>
<td>Heave</td>
<td>5cm/5%</td>
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<tr>
<td>TrueHeave</td>
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### Teledyne INS Type -20

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<tr>
<td>TrueHeave</td>
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### Teledyne INS Type -30

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<td>Heading</td>
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<tr>
<td>Heave</td>
<td>5cm/5%</td>
</tr>
<tr>
<td>TrueHeave</td>
<td>2 cm/2%</td>
</tr>
</tbody>
</table>

### Extended Range Projector (TC2187)*

Optional postprocessing with POSPac MMS, Optional Fugro MarineStar®.

### PLD17291-8 PLD17291-8

For relevant tolerances for dimensions above and detailed outlined drawings see Product Description.

*Optional

1 Nominal values

2 This is a depth range within which the system is normally operated, from the minimum depth to a depth value corresponding to the max. swath -50%.

3 This is the single value corresponding to the depth at which the swath is reduced to 10% of its max. value. For actual swath performance refer to Product Description.

4 With 4m GPS base line. Heave 5cm/5% whichever is greater for periods +/- 20sec

5 An extinction coverage of +/- 20° is observed at about 530 meter water.