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

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_A Teledyne Marine company_
# SEABAT T50-R SYSTEM SPECIFICATIONS

**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 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

## T50 Acoustic performance

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Across-track receiver beam width</th>
<th>Along-track transmit beam width</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 kHz</td>
<td>0.5°</td>
<td>0.5°</td>
</tr>
<tr>
<td>200 kHz</td>
<td>1°</td>
<td>1°</td>
</tr>
</tbody>
</table>

### Sonar wet-end

- **Teledyne Type 20/30 IMU**
  - Roll/Pitch: 0.02°
  - Heading: 0.015°
  - Heave: 5cm/5%
  - TrueHeave: 2cm/2%

### Rack-mounted Sonar Processor

- **Standard**: 19" rack-mount
  - 88 (2U)
  - 478* 462 12.3-13.8 N/A

### Teledyne INS Type -20

- Roll/Pitch: 0.02°
- Heading: 0.015°
- Heave: 5cm/5%
- TrueHeave: 2cm/2%

### Teledyne INS Type -30

- Roll/Pitch: 0.01°
- Heading: 0.010°
- Heave: 5cm/5%
- TrueHeave: 2cm/2%

### Input voltage

- **100-230VAC 50/60Hz**

### Transducer cable length

- **25m (standard)** Optional: 10m, 50m or 100m

### Temperature (operational / storage)

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### Input voltage

- **100-230VAC 50/60Hz**

### Transducer cable length

- **25m (standard)** Optional: 10m, 50m or 100m

### Temperature (operational / storage)

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