

# SeaBat<sup>®</sup> T50-P

## Ultra high resolution portable Multibeam Echosounder

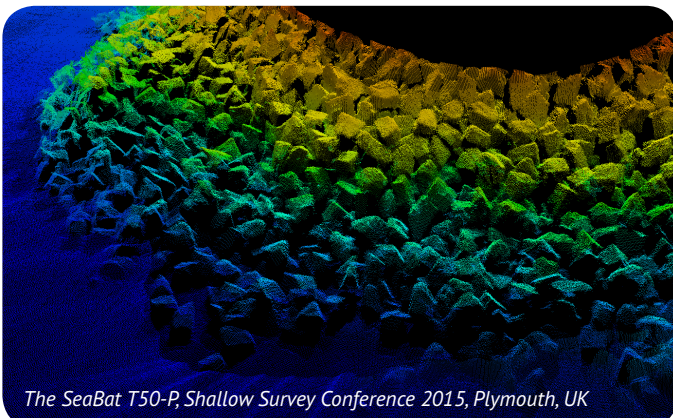


### Unprecedented clean and ultra high data quality for faster operational surveys and reduced processing time

The SeaBat T50-P is the new addition to the leading SeaBat T-series product range, engineered from the ground up to evolve with your business. Combined with the Portable Sonar Processor, the SeaBat T50-P provides unprecedented survey data, providing faster operational surveys and reduced processing time.

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

The SeaBat T50-P is designed for fast mobilization on smaller vessels. The Portable Sonar Processor and sonar head form a compact system, securing minimal interfacing and low space requirements.



*The SeaBat T50-P, Shallow Survey Conference 2015, Plymouth, UK*

### SeaBat T50-P standard configuration

#### Portable Sonar Processor

- Reduced cable connections – fast mobilization
- Single-point, accurate, sensor time-tagging
- Water-resistant IP54 rated
- 24VDC and 100-230VAC for maximum flexibility
- 25m cable to wet-end components

#### T50 sonar head assembly

- 190 – 420kHz wide-band
- Robust titanium housing
- Less than 8kg in water

## PRODUCT BENEFITS

- Unprecedented clean and ultra high data quality for faster operational surveys and reduced processing time
- Fully frequency agile from 190 to 420 kHz, allowing for improved swath performance and reduced survey time under difficult conditions
- Designed for smaller vessel portable use. The compact system allows for fast mobilization, minimal interfacing and low space requirements
- Significantly reduced amount of data collected with the intelligent data reduction algorithms in the compressed water column feature

# Teledyne RESON SeaBat® T50-P

## SEABAT T50-P SYSTEM SPECIFICATIONS

<b>Input voltage</b>	24VDC or 100-230VAC 50/60Hz
<b>Power (typical / max)</b>	150W / 300W
<b>Ingress protection</b>	Water resistant (IP54)
<b>Transducer cable length</b>	25m (standard) Optional: 10m, 50m or 100m
<b>Temperature (operational / storage)</b>	Portable Sonar Processor: -5°C to +40°C / -30°C to +70°C

	Height [mm]	Width [mm]	Depth [mm]	Weight [kg/air]	Weight [kg/water]
<b>T50 Rx (EM7218)</b>	102.0	460.0	90.7	8.2	3.9
<b>T50 Tx (TC2181)</b>	86.6	93.1	280	5.4	3.4
<b>Portable Sonar Processor</b>	131	424	379	14	N/A

<b>T50 Acoustic performance</b>	<b>400kHz (max. frequency)</b>	<b>200kHz (min. frequency)</b>
<b>Across-track receiver beam width<sup>1</sup></b>	0.5°	1°
<b>Along-track beam width<sup>1</sup></b>	1°	2°
<b>Number of beams</b>	Min 10, Max 512	
<b>Swath coverage (up to)</b>	150° Equi Distant, 165° Equi Angle	
<b>Typical Depth (CW<sup>2</sup>)</b>	0.5-200 meters	0.5-400 meters
<b>Max Depth (CW<sup>3</sup>)</b>	250 meters	475 meters
<b>Typical Depth (FM<sup>2</sup>)</b>	0.5-225 meters	0.5-550 meters
<b>Max Depth (FM<sup>3</sup>)</b>	300 meters	575 meters
<b>Ping rate (range dependent)</b>	Up to 50 pings/s	
<b>Sample rate</b>	34 kHz or 66 kHz	
<b>Pulse length (CW)</b>	15 – 300µs	
<b>Pulse length (FM)</b>	300µs – 10ms	
<b>Depth resolution</b>	6 millimeters	
<b>Depth rating (sonar head)</b>	50 meters	

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

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

### T50-P Scope of supply

- Receiver EM7218
- Projector TC2181
- Portable Sonar Processor
- 25m Receiver cable
- 25m Projector cable
- Waterproof cable set
- Wet-end bracket
- 3-year warranty

### Optional extra features

- 10m, 50m or 100m cable
- Hydro dynamic fairing
- Dual head bracket
- Motion and positioning sensors
- RESON Sound Velocity Probes
- Teledyne PDS Survey Package
- RESON Service Level Agreements
- Normalized backscatter
- X-Range - improve range and reduce external noise
- Multi-Detect - multiple detections for enhanced detail over complex features and water column targets
- FlexMode – increase data density where you need it most
- Pipe Detection & Tracking – optimize detection of pipes
- Full rate dual head across the entire frequency range

For more details visit [www.teledyne-reson.com](http://www.teledyne-reson.com) or contact your local Teledyne RESON Office. Teledyne RESON reserves the right to change specifications without notice. 2015@Teledyne RESON

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