SeaBat® 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.

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, mininal interfacing and low space requirements
- Significantly reduced amount of data collected with the intelligent data reduction algorithms in the compressed water column feature

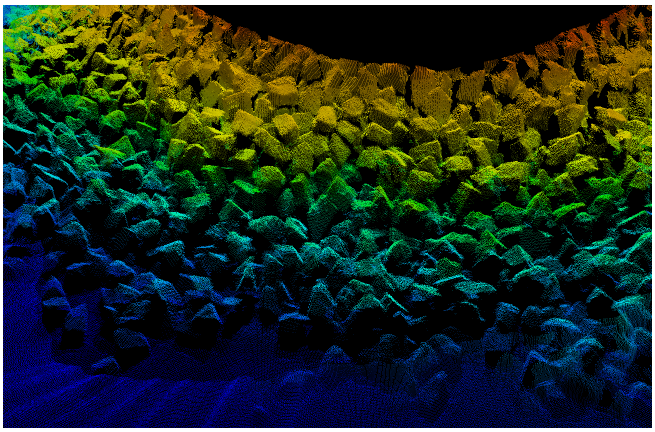
SeaBat T50-P standard configuration

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



TELEDYNE MARINE

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SEABAT T50-P SYSTEM SPECIFICATIONS

Input voltage:	24VDC or 100-230VAC 50/60Hz
Power (typical / max):	150W / 300W
Ingress protection:	Water resistant (IP54)
Transducer cable length:	25m (standard) Optional: 10m or 50m
Temperature (operational / storage):	Portable 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

	height [mm]	width [mm]	lenght [mm]	weight [kg/air]	weight [kg/water]
T50 Rx (EM7218):	91	460	102	8.2	3.9
T50 Tx (TC2181):	87	93	280	5.4	3.4
Portable Sonar Processor:	131	424	379	14	N/A

T50 Acoustic performance:	400kHz (max. frequency)	200kHz (min. frequency)
Across-track receiver beam width[1]:	0.5°	1°
Along-track beam width[1]:	1°	2°
Number of beams:	Min 10, Max 1024	
Swath coverage (up to):	150° Equi Distant, 170° Equi Angle	
Typical depth (CW[2]):	0.5-150 meters	0.5-375 meters
Max depth (CW[3]):	250 meters	450 meters
Typical depth (FM[2]):	0.5-275 meters	0.5-550 meters
Max depth (FM[3]):	375 meters	575 meters
Ping rate (range dependent):	Up to 50 pings/s	
Sample rate:	34 kHz or 66 kHz	
Pulse length (CW):	15 – 300µs	
Pulse length (FM):	300µs – 10ms	
Depth resolution:	6 millimeters	
Depth rating (sonar head):	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 EXTRAS

- 10m or 50m 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

TELEDYNE | RESON

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Specifications subject to change without notice.
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