



CODEVINTEC

Tecnologie per le Scienze della Terra e del Mare

SeaBat® T50-P Ultra high resolution portable Multibeam Echosounder



Combined with the Portable Sonar Processor the SeaBat T50-P provides unprecedented survey data, providing faster operational surveys and reduced processing time.

Key Features

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.



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 Sea-Bat 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.

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

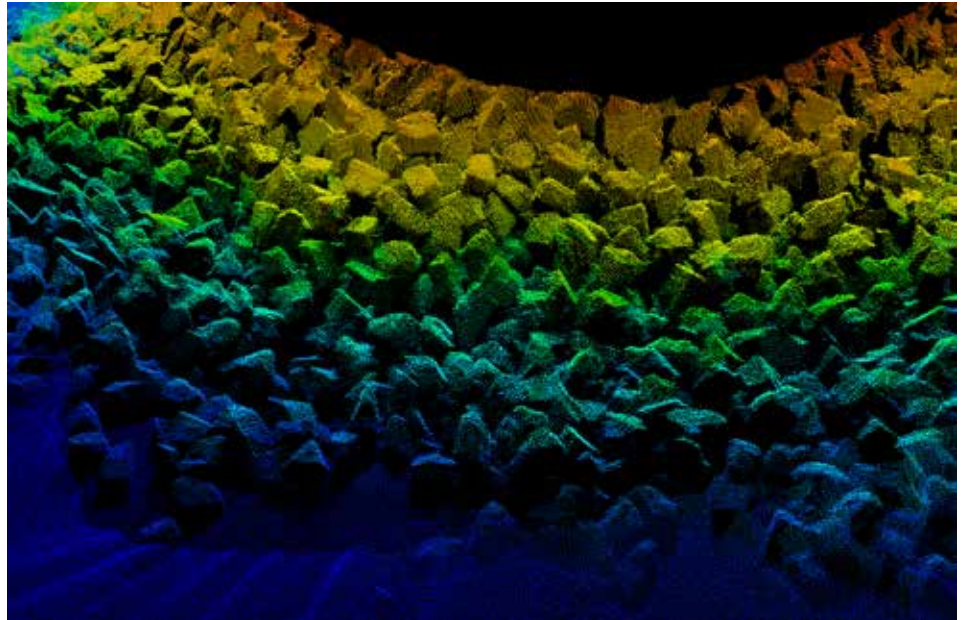
T50 sonar head assembly

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

Product Features

- > 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

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



**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, 50m or 100m				
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]	depth [mm]	weight [kg/air]	weight [kg/water]
T50 Rx (EM7218)	102.0	460.0	90.7	8.2	3.9
T50 Tx (TC2181)	86.6	93.1	280	5.4	3.4
Portable Sonar	131	424	379	14	N/A
T50 Acoustic performance	400kHz (max. frequency)		200kHz (min. frequency)		
Across-track receiver width¹	0.5°		1°		
Along-track beam width¹	1°		2°		
Number of beams	Min 10, Max 1024				
Swath coverage (up to)	150° Equi Distant, 165° Equi Angle				
Typical Depth (CW²)	0.5-200 meters		0.5-400 meters		
Max Depth (CW³)	250 meters		475 meters		
Typical Depth (FM²)	0.5-225 meters		0.5-550 meters		
Max Depth (FM³)	300 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.



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T50-P Scope of supply

- > Receiver EM7218
- > Projector TC2181
- > Portable Sonar Processor
- > 25m Receiver cable with the intelligent data reduction algorithms in the compressed water column feature
- > 25m Projector cable
- > Waterproof cable set
- > Wet-end bracket
- > 3-year warranty

Optional extra feature

- > 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

