

SeaBat[®] T20-P

High resolution multibeam echosounder



Superior acoustic quality engineered for the demanding marine environment

The T20-P is a new addition to the leading SeaBat product range engineered from the ground up to evolve with your business. Combined with the Portable Sonar Processor the T20-P provides uncompromised survey data in a highly portable water resistant package designed for small vessel use.

The solution includes a range of powerful software features at an attractive price, with the option for future feature expansions to grow with your needs.

The T20-P can be supplied in ruggedized flight cases with total weight and dimensions suitable for check-in on commercial airlines and can be transported by one person.

T20-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
- 10m cable to wet-end components

T20 sonar head assembly

- 200 – 400kHz wide-band
- Robust titanium housing
- Less than 8kg in water

FEATURES

Product features

- Snippets & sidescan backscatter
- Full water column backscatter
- Tracker – powerful tool for automated control
- SeaBat User Interface. Runs on separate laptop or PC (not included)
- Selectable Beam Density – you can define what you need to get the job done

Optional extra features

- Max 512 Beams
- 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 – unique to SeaBat, optimize detection of pipes

Teledyne RESON SeaBat® T20-P

SEABAT T20 SYSTEM SPECIFICATIONS

Input voltage	24VDC or 100-230VAC 50/60Hz				
Power (typical / max)	200W / 300W				
Ingress protection	Water resistant (IP54)				
TRANSDUCER CABLE LENGTH	10m (standard), 25m, 50m (optional)				
Temperature (operational / storage)	Portable Sonar Processor: -5°C to +45°C / -30°C to +70°C Sonar wet-end: -2°C to +30°C / -30°C to +55°C				
	Height [mm]	width [mm]	depth [mm]	weight [kg/air]	weight [kg/water]
T20 Rx (EM7219)	102.0	254.0	123.0	5.0	4.2kg
T20 Tx (TC2181)	86.6	93.1	280	5.4	3.4
Portable Sonar Processor	131	424	379	14	N/A
T20 Acoustic performance	400kHz (max. frequency)			200kHz (min. frequency)	
Across-track receiver beam width (nominal values ¹)	1° (center)			2° (center)	
Along-track beam width (nominal values ¹)	1°			2°	
Number of beams	Min 10, Max 256 (Optional 512)				
Swath coverage (up to)	140° Equi-Distant 165° Equi-Angle				
Typical Depth (CW ²)	0.5-150 meters			0.5-375 meters	
Max Depth (CW ²)	250 meters			550 meters	
Typical Depth (FM ³)	0.5-180 meters			0.5-450 meters	
Max Depth (FM ³)	300 meters			575 meters	
Ping rate (range dependent)	Up to 50 pings/s				
Pulse length (CW)	30 – 300µs				
Pulse length (FM)	300µs – 10ms				
Depth resolution	6mm				
Depth rating (sonar head)	50meters				

For detailed outline drawings and relevant dimension tolerances, please refer to the Product Description*

1 All beam widths measured at -3dB, unsteered with a sound velocity of 1480m/s.

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.

T20-P Scope of supply

Receiver EM7219
Projector TC2181
Portable Sonar Processor
10m Receiver cable
10m Projector cable
Waterproof cable set
Wet-end bracket

Optional extra

- 25m, 50m cable
- Motion and positioning sensors
- RESON Sound Velocity Probes
- RESON PDS2000 Survey Package
- RESON Service Level Agreements

For more details visit www.teledyne-reson.com or contact your local Teledyne RESON Office. Teledyne RESON reserves the right to change specifications without notice. 2013©Teledyne

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