

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 waterproof 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
- 24V DC for vessel use
- 110 - 230VAC for office use
- 10m cable to wet-end components

T20 1° x 1° 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)
- Configurable beamformer – you can define what you need to get the job done

Optional extra features

- X-Range - improve range and reduce external noise
- FlexMode – increase data density where you need it most
- Multi-detect – improve detection of complex and small objects
- Full Rate Dual Head – ultra-wide coverage with integrated user interface
- 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 f (IP54)				
TRANSDUCER CABLE LENGTH	10m (standard), 25m, 50m (optional)				
Temperature (operational / storage)	Portable Sonar Processor: -2°C to +40°C / -30°C to +55°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)		2.2 (center)		
Along-track beam width (nominal values10)	1.1°		2.2°		
Number of beams	Max 512, Min 10				
Swath coverage (up to)	140° (165°)		140°		
Depth (typical)	0.5-150 meters		0.5-400 meters		
Max range scale	500 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)	50m				

For relevant tolerances for dimensions above and detailed outlined drawings see 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 a single value corresponding to the depth at which the swath is reduced to 10% of its max. value.

T20-P Scope of supply

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

Optional extra

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

RESON A/S

Denmark
 Tel: +45 4738 0022
 reson@reson.com

RESON Inc.

U.S.A.
 Tel: +1 805 964-6260
 sales@reson.com

RESON OFFSHORE Ltd.

Scotland U.K.
 Tel: +44 1224 709 900
 sales@reson.co.uk

RESON B.V.

The Netherlands
 Tel: +31 (0) 10 245 1500
 info@reson.nl

RESON Pte. Ltd.

Singapore
 Tel: +65 6725 9851
 singapore@reson.com