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
- 24VDC and 100-230VAC for maximum flexibility
- 10m cable to wet-end components

**T20 sonar head assembly**
- 190 – 420kHz wide-band
- Robust titanium housing
- Less than 8kg in water

**3 years warranty**
Our hardware is quality-tested to meet the most demanding standards, and backed by the full support of our comprehensive after-sales program, and 3 years of warranty you can be sure that the T20-P won't let you down.

**PRODUCT BENEFITS**

**Product features**
- Sonar User Interface - highly configurable to suit your needs.
- Snippets & sidescan backscatter
- Full water column backscatter
- Tracker – powerful tool for automated control
- Selectable Beam Density – you can define what you need to get the job done

**Optional extra features**
- 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
- Full Rate Dual Head

SeaBat T20-P
High resolution multibeam echosounder
SeaBat T20-P 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, 100m (optional)
Temperature (operational / storage) Sonar wet-end: -2°C to +35°C / -30°C to +55°C

<table>
<thead>
<tr>
<th></th>
<th>Height [mm]</th>
<th>width [mm]</th>
<th>depth [mm]</th>
<th>weight [kg/air]</th>
<th>weight [kg/water]</th>
</tr>
</thead>
<tbody>
<tr>
<td>T20 Rx (EM7219)</td>
<td>102.0</td>
<td>254.0</td>
<td>123.0</td>
<td>5.0</td>
<td>4.2</td>
</tr>
<tr>
<td>T20 Tx (TC2181)</td>
<td>86.6</td>
<td>93.1</td>
<td>280</td>
<td>5.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Portable Sonar Processor</td>
<td>131</td>
<td>424</td>
<td>379</td>
<td>14</td>
<td>N/A</td>
</tr>
</tbody>
</table>

T20 Acoustic performance

Across-track receiver beam width

Along-track beam width

Number of beams Min 10, Max 512

Swath coverage (up to) 140° Equi distance 165° Equi Angle (12x water depth with dual head)

Typical Depth (CW) 0.5-150 meters 0.5-375 meters
Max Depth (CW) 250 meters 550 meters

Typical Depth (FM) 0.5-180 meters 0.5-450 meters
Max Depth (FM) 300 meters 575 meters

Ping rate (range dependent) Up to 50 pings/s

Pulse length (CW) 15 – 300µs

Pulse length (FM) 300µs – 10ms

Depth resolution 6mm

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.

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 extras

- 25m, 50m, 100m cable
- Fairing
- Dual head bracket
- Motion and positioning sensors
- RESON Sound Velocity Probes
- RESON Teledyne PDS Survey Package
- RESON Service Level Agreements (SLA)