SeaBeam 1050D dual frequency Multibeam Echosounder collects bathymetric and sidescan data in both shallow and medium depth waters over a wide swath in excess of 150 degrees.

Only one sonar processor powers both frequencies 50 and 180 kHz. This feature is unique in the industry and minimizes the logistical effort of users. Only one mouse-click makes the operator change the working frequency.

SeaBeam 1050D offers high resolution survey in shallow water and medium depth water surveys until 3000 water depth on a Windows NT-based platform. The system combines the SeaBeam 1180 and SeaBeam 1050 performance.

SeaBeam 1050D has become an industry standard in the commercial offshore survey sector as well as in the research society.

**YOUR MULTIBEAM SOLUTION**

- 50 / 180 kHz dual frequency
- 126 individual beams
- 153° swath width
- 3000 m max. depth performance
- exceeding IHO standards
- integrated side scan view
- realtime motion compensation
- 1,5° resolution
- excellent sidelobe suppression
- Windows 2000&XP or UNIX

Excellent Performance in Both Shallow and Medium Depth Water

Professional Survey in Water Depths up to 3000 m
**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Feature</th>
<th>50 kHz</th>
<th>180 kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>50 kHz</td>
<td>180 kHz</td>
</tr>
<tr>
<td>Number of Beams</td>
<td>126 (fewer selectable)</td>
<td>126 (fewer selectable)</td>
</tr>
<tr>
<td>Beam Width</td>
<td>153°</td>
<td>153°</td>
</tr>
<tr>
<td>Power Supply</td>
<td>115 / 230 V AC, user selectable</td>
<td>115 / 230 V AC, user selectable</td>
</tr>
<tr>
<td>Max. Pulse Power</td>
<td>3.5 KW per transducer array</td>
<td>500 W per transducer array</td>
</tr>
<tr>
<td>Max. Source Level</td>
<td>234 dB 1 µPa/l m</td>
<td>220 dB 1 µPa/l m</td>
</tr>
<tr>
<td>Pulse Length</td>
<td>0.3, 1, 3, 10 ms; selectable</td>
<td>0.15, 0.3, 1.3 ms; selectable</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>12 kHz, 3.3 kHz, 1 kHz; selectable</td>
<td>12 kHz, 3 Hz, 1 kHz; selectable</td>
</tr>
<tr>
<td>Sidelobe Suppression</td>
<td>36 dB (transmission and reception)</td>
<td>36 dB (transmission and reception)</td>
</tr>
<tr>
<td>Survey Speed</td>
<td>up to 16 kn for continuous seafloor coverage</td>
<td>up to 16 kn for continuous seafloor coverage</td>
</tr>
</tbody>
</table>

**Sonar Processor Unit (SEE 30)**
- Dimensions: 480 x 540 x 360 mm
- Weight: approx. 33 kg

**Transducer (LSE 237)**
- Dimensions: 520 x 290 mm each
- Weight w/ cable: 60 kg

**Transducer (LSE 307)**
- Dimensions: 390 x 280 mm each
- Weight w/o cable: 17 kg

**Motion**
- DMS-2, Octans, POS M/V, MRU 5

**Heading**
- NMEA 0183 standard, sentence HDT

**Position**
- NMEA 0183 standard, sentence GGA or VTG

**Sound Velocity**
- Data input via RS 232

**Software**
- ELAC HDP 4061, CARIS, COASTAL OCEANOGRAPHICS, EIVA, QPS, ROXAR

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**Diagram:**
- **50 kHz**
  - Depth/m: 20, 100, 300, 500, 700, 1000, 1200, 1500, 2000, 2500
  - Coverage/km: 153° (8.3 x depth), 131° (4.6 x depth), 108° (2.3 x depth), 86° (1.7 x depth), 63° (1.2 x depth), 41° (0.7 x depth)

- **180 kHz**
  - Depth/m: 20, 100, 300, 500, 700, 1000, 1200, 1500, 2000, 2500
  - Coverage/km: 135° (8.3 x depth), 115° (4.6 x depth), 108° (2.3 x depth), 86° (1.7 x depth), 63° (1.2 x depth), 41° (0.7 x depth)