Teledyne BlueView

BV5000

3D Mechanical Scanning Sonar

BlueView’s BV5000-1350 and BV5000-2250 3D mechanical scanning sonar create high-resolution imagery of underwater areas, structures, and objects. With the touch of a button, these new 3D mechanical scanning sonar create 3D point clouds of an underwater scene with minimal training required. The compact, lightweight units are easily deployed on a tripod or an ROV. The scanning sonar head and integrated mechanical pan and tilt mechanism generate both sector scans and spherical scan data. For the first time, get 3D laser-like scanning capabilities underwater, even in low and zero visibility conditions and seamless integration with traditional laser scan imagery.

FEATURES:
- Easy, one-touch scan function
- 3D mosaic imaging without position info
- Easily combined with laser scan imagery
- Compact size fits into tight spaces
- Operates in low and zero visibility conditions

APPLICATIONS:
- Two model options (1.35 and 2.25MHz)
- Standard Ethernet/RS485 interface
- Easy Windows-based software
- Leica Cyclone data compatible
- Sector and spherical scans

PRODUCT FEATURES AND APPLICATIONS

FEATURES:
- Easy, one-touch scan function
- 3D mosaic imaging without position info
- Easily combined with laser scan imagery
- Compact size fits into tight spaces
- Operates in low and zero visibility conditions

APPLICATIONS:
- 3D site survey
- 3D structure inspection
- Rig decommissioning
- Bridge inspections
- Underwater metrology

Subsea Manifolds.
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>BV5000-1350</th>
<th>BV5000-2250</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sonar &amp; Software</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sector/Spherical Scan Area (º)</td>
<td>45 - 360</td>
<td>45 - 360</td>
</tr>
<tr>
<td>Sonar Field of View (º)</td>
<td>45 x 1</td>
<td>45 x 1</td>
</tr>
<tr>
<td>Update Rate (Hz)</td>
<td>Up to 40</td>
<td>up to 40</td>
</tr>
<tr>
<td>Frequency (MHz)</td>
<td>1.35</td>
<td>2.25</td>
</tr>
<tr>
<td>Maximum Range</td>
<td>30 m (98 ft.)</td>
<td>10 m (32 ft.)</td>
</tr>
<tr>
<td>Optimum Range</td>
<td>1 - 20 m (3.2 - 65 ft.)</td>
<td>0.5 - 7 m (1.6 - 23 ft.)</td>
</tr>
<tr>
<td>Number of Beams</td>
<td>256</td>
<td>256</td>
</tr>
<tr>
<td>Beam Width (º)</td>
<td>1 x 1</td>
<td>1 x 1</td>
</tr>
<tr>
<td>Beam Spacing (º)</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>Time Resolution</td>
<td>0.015 m (0.59 in.)</td>
<td>0.010 m (0.39 in.)</td>
</tr>
<tr>
<td>Data Output Format</td>
<td>.son, .off, and .xyz files</td>
<td>.son, .off, and .xyz files</td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (L x W x H in inches)</td>
<td>10.5 x 9.2 x 15.4</td>
<td>8.9 x 8.6 x 15.4</td>
</tr>
<tr>
<td>Weight in Air/Water (lbs.)</td>
<td>21.7/8.2</td>
<td>19.1/6.0</td>
</tr>
<tr>
<td>Depth Rating</td>
<td>300 m (1,000 ft.) / 4,000 m (13,123 ft.)</td>
<td>300 m (1,000 ft.) / 4,000 m (13,123 ft.)</td>
</tr>
<tr>
<td>Coms (Sonar/Pan &amp; Tilt)</td>
<td>Ethernet/RS485</td>
<td>Ethernet/RS485</td>
</tr>
<tr>
<td>Power Consumption (W)</td>
<td>45 max.</td>
<td>45 max.</td>
</tr>
<tr>
<td>Power Requirement (V DC)</td>
<td>20 - 29</td>
<td>20 - 29</td>
</tr>
</tbody>
</table>

## STANDARD EQUIPMENT AND AVAILABLE OPTIONS

### Included

- MB1350-45 or MB2250-45 Sonar
- Pan & Tilt w/ mounting hardware
- Sonar, Pan & Tilt junction box
- Shipping case
- Accessory kit*

### Optional

- 15 ft. Sonar, Pan & Tilt Cable (1 included w/ BV5000 Accessory Kit)
- 200 ft. Sonar, Pan & Tilt Cable Assembly (needed for tripod and fixed mount systems)
- 4 ft. Sonar, Pan & Tilt Cable Whip Kit w/ Wiring Diagram (needed for ROV mount systems)
- EXC500 Ethernet Extender Kit (includes 500 ft. Cable Assembly)

### Software

- RS485 to USB drivers
- ProScan 1.3 (or current) + MeshLab (included w/ ProScan)
- Leica Cyclone Register
- Leica Cyclone Model
- Leica Cyclone Register Customer Care Package (CCP)
- Leica Cyclone Model Customer Care Package (CCP)

### Manuals

- BV5000 User Handbook
- Quick Start Guide
- Cyclone/BlueView (ships with Cyclone software)

### Training

- On-Site “Getting Started” hardware/software (per day)
- Leica Cyclone “On-Site” Training (2-day)

### Warranty

- 1 Year
- Extended Warranty (per year)

---

*Accessory kit includes: Retract-A-Bit Hex Driver; 7 ft. Cat 5 Ethernet Cable; 15 ft. Sonar/Pan & Tilt Cable; 2 m USB Cable; 15A US Power Cord; RS485 to USB driver CD; ProScan 1.3 (or current) + MeshLab CD.