



# SeaBat 8125 PRODUCT SPECIFICATION

ULTRA HIGH RESOLUTION FOCUSED MULTIBEAM ECHOSOUNDER SYSTEM



- Focused 0.5° beams
- 240 beams
- 2.5 cm near field resolution
- 6 mm depth resolution
- 120° swath coverage

The SeaBat 8125 is the first wide-sector, wide-band, focused multibeam sonar ever to be deployed. Utilizing 240 dynamically focused receive beams, the system measures a 120° swath across the seafloor, detects the bottom, and delivers the measured ranges at a depth resolution of 6 mm. The backscatter intensity image is displayed in real time on the sonar display.

The 8125 can be controlled through its native graphical user interface, or through an external control like the 6042 data collection and navigation software package.

The system can be mounted on a survey vessel or deployed on an ROV at depths down to 1500 m. The high-speed data uplink is carried on a standard SeaBat copper cable for surface installation. A fiber-optical interface is available for ROV deployment.

Two 8125 systems can be configured as a dual-headed system, with Option 011, and for complete control the 6043 image fusion and controller merges the images of the two sonar heads into one.



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# SeaBat 8125 SYSTEM SPECIFICATIONS

## SYSTEM PERFORMANCE

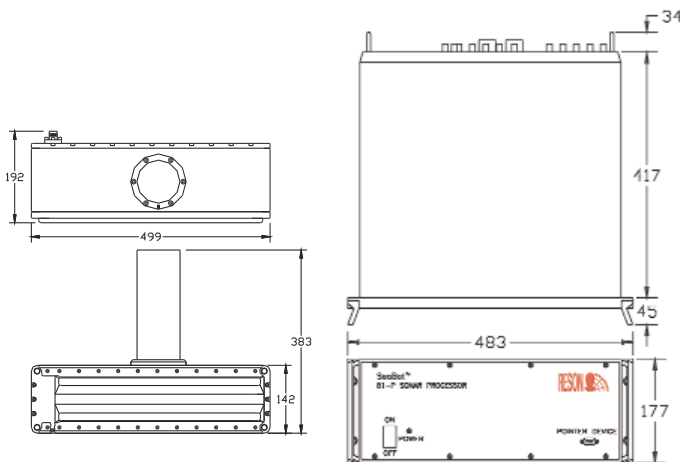
<b>Frequency:</b>	455 kHz
<b>Depth Resolution:</b>	6 mm
<b>Swath Coverage:</b>	120°
<b>Max Range:</b>	120 m
<b>Number of Beams:</b>	240
<b>Along-Track Beamwidth:</b>	1°
<b>Across-Track Beamwidth:</b>	0.5°
<b>Accuracy:</b>	<ul style="list-style-type: none"> <li>• IHO Special Order</li> <li>• U.S. Army Corps of Engineers Special Order</li> </ul>
<b>Operational Speed:</b>	Up to 12 knots
<b>Max. Update Rate:</b>	40
<b>Transducer Depth Rating:</b>	600m (Standard) 1500m (Optional)

## INTERFACE

<b>System Supply:</b>	115V/230V 50/60 Hz, 350W max
<b>Video Display:</b>	SVGA, 800 x 600, 72 Hz
<b>System Control:</b>	Trackball or from Ethernet
<b>Data Output:</b>	10 MB Ethernet or serial RS232C
<b>Data Uplink:</b>	High-speed digital coax with fiber-optic option
<b>Sonar Head Supply:</b>	24V, 4A (from ROV or sonar processor)
<b>Temperature:</b>	Operating: 0° to +40° C Storage: -30° to +55° C

## MECHANICAL INTERFACE

<b>Dimensions (HWD):</b>	
<b>Sonar head:</b>	192 x 499 x 383 (depth includes projector)
<b>Processor:</b>	177 x 483 x 417
<b>Transducer Weight:</b>	
<b>600m aluminum version:</b>	24.3 kg (dry) 8.6 kg (wet)
<b>1500m titanium version:</b>	35.2 kg (dry) 19.1 kg (wet)
<b>Processor Weight:</b>	20 kg



Dimensions are in mm



Version: B023 021024

Due to our policy of continuous product improvement, RESON reserves the right to change specifications without notice.