

4. Scientific equipment

4.1 Multi-beam bathymetry and side-scan image

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The SeaBat 8160 is a 50 kHz Multibeam Echo Sounder (MBES) system by RESON, Inc. The following table provides information as to the technical specifications of the SeaBat 8160:

Specification	Value		
MULTIBEAM ECHO SOUNDER			
Frequency	50 kHz, nominal		
Bottom Detect Range Resolution	≤ 750 meters: 1.4 cm 1,000 to 1,500 meters: 2.9 cm 1,750 to 5,000 meters: 8.6 cm		
Swath Coverage	130deg with maximum swath width of approximately 4 times the water depth.		
Along-Track Beam Width	1.5deg, 3.0deg, 4.5deg, or 6.0deg (based on operator selection)		
Number of Horizontal Beams	126		
SIDESCAN BACKSCATTER			
Range Resolution	Range	Sample Rate	Resolution
	5-750 m	7109.375 Hz	10 cm
	1,000 – 1,500 m	3554.688 Hz	20 cm
	1,750 – 5,000 m	1184.896 Hz	60 cm