

SeaBat 8111

PRODUCT SPECIFICATION

MULTIBEAM ECHOSOUNDER



- Phase and amplitude bottom detection
- 100 kHz frequency
- 150° swath coverage
- Real-time quality control
- Sidescan upgradeable
- Modular and portable
- Pitch stabilization

The SeaBat 8111 is a modular multibeam echosounder system operating at 100 kHz. When installed on a vessel, it produces high-density, high-accuracy soundings on the seafloor over a 150° swath. Major system components include a transducer array, a transceiver unit, and a processor unit.

The SeaBat 8111 transducer array is comprised of a cylindrical receive array and a linear transmitter array, mounted together on a support cradle that provides mounting points to the vessel. Lightweight and portable, the array can be installed temporarily over the side of a vessel of opportunity—a first for a system in this frequency range.

The SeaBat 8111 transceiver features plug-in cards for easy maintenance and is controlled from the sonar processor.

The Seabat 8111 processor is compatible with other SeaBat sonar heads, can be updated in minutes to accommodate future requirements, and features a user-friendly point-and-click interface.



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SeaBat 8111 SYSTEM SPECIFICATIONS

SYSTEM PERFORMANCE

Frequency:	100 kHz
Range Resolution:	3.7 cm
Swath Coverage:	150°
Range:	3m to 800m
Number of Beams:	101
Along-Track Beamwidth:	1.5° 3.0° 4.5° 6.0°*
Across-Track Beamwidth:	1.5°
Stabilization:	Pitch stabilization within +/-15°
Projector Beam Control:	External motion sensor required
Accuracy:	IHO Compliant
Operational Speed:	Up to 20 knots
Max. Update Rate:	35 Hz
Transducer Pressure Rating:	100m

*operator selectable

INTERFACE

System Supply:	90 to 260VAC, 50/60 Hz, 200W max.
Video Display:	SVGA, 800 x 600, 72 Hz
System Control:	Trackball or from Ethernet
Data Output:	10 MB Ethernet or serial RS232C
Data Uplink:	High-speed digital coax with fiber-optic option
Temperature:	Operating: 0° to +40° C Storage: -30° to +55° C

RELATED PRODUCTS

- Option 040 Extended range capabilities
- Option 033 Sidescan upgrade
- Option 051 24DC power supply for SeaBat 81-P Processor

MECHANICAL INTERFACE



Dimensions (in mm):

Transducer Array:

Hydrophone: 636 x 118 (Dia./Length)

Projector: 113 x 650 (Dia./Length)

Processor: 177 x 483 x 417

Transceiver: 267 x 483 x 489

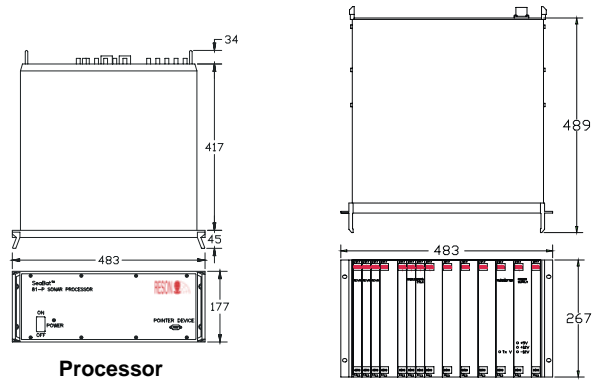
Weight:

Transducer Array: 72 kg (dry) / 59 kg (wet) with cables

Processor: 20 kg

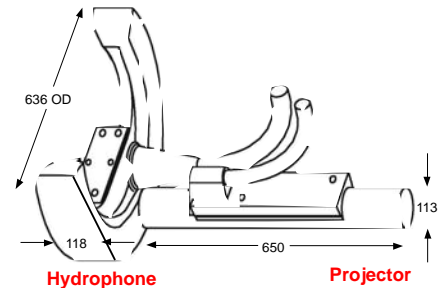
Transceiver: 13.6 kg

Cable Length: 15m



Processor

Transceiver



Transducer Array

SEAFLOOR COVERAGE

(with Extended Range option)

Bottom Depth (meters)	Swath Width (meters)
5 to 150	Up to 1110 (7.4 x water depth)
300	960 (3.2 x water depth)
450	810 (1.8 x water depth)
600	600 (1.0 x water depth)
750	450 (0.6 x water depth)
900	360 (0.4 x water depth)

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