

**EXPEDITION
READY**



SeaBat[®] 7112

MULTIBEAM SONAR SYSTEM FOR DIVER DETECTION

The new SeaBat 7112 is an advanced, COTS-based high resolution object detection sonar suitable for both commercial & military applications.

Commercial uses include iceberg detection & tracking, marine mammal detection tracking, biomass estimation and general object location.

Military applications include diver / swimmer detection & tracking, surveillance and asset protection.

In response to strong demand for equipment to protect against underwater threats in littoral areas, RESON developed the SeaBat 7112 Multibeam Sonar System. The SeaBat 7112 utilizes state-of-the-art sensor technology, and is a cost-effective solution for a wide range of commercial & military applications.

A single transmit beam illuminates the entire 360° to provide complete sector coverage. Depending on the environment and tactical scenarios, one of three flexible deployment methods may be used: over-the-side, in the water column and on the seafloor. When deployed remotely on the seafloor, an optical cable connects the sensor and the shore base station.

Variable waveforms and pulse lengths maximize performance in difficult acoustic environments.

The SeaBat 7112 is controlled by RESON's new-generation integrated control and sonar processor unit that has been proved effective in installations all over the world.

PRODUCT LOGBOOK



FLEXIBILITY	Highly-adaptable to changing environments
COVERAGE	360° Sector illuminated by a single ping
INSTALLATION	Multiple flexible installation configurations available
COTS	Commercial-off-the-shelf (COTS) based
OPTIONS	<ul style="list-style-type: none"> 19" marine grade monitor 50m or 100m LCU to 7P host cable 1 TB external RAID drive 10m LCU to transducer cables Automatic detection & tracking software 7112 sea floor mount 7112 full sensor package SVP-70 sound velocity profiler with 25m Cable Services and Support Agreement

SEABAT 7112 SYSTEM SPECIFICATIONS

FREQUENCY	100 kHz
DEPTH RATING	120m
NUMBER OF BEAMS	208
RANGE RESOLUTION	3.75 cm
RECEIVER BEAMWIDTH	2.08°
SECTOR COVERAGE	360°
MAX UPDATE RATE	Up to 15 Hz (range selection dependent)
PULSE TYPE	Gated CW, matched filter processing with FM
MAX PULSE LENGTH	3ms (with gated CW)
MIN PULSE LENGTH	50µs (with gated CW)
RANGE (TYPICAL)	Up to 1000m 100kHz
POWER REQUIREMENTS	110/220V AC; 50/60Hz 500W
INPUT	Sound velocity profile, heading and tilt
SYSTEM CONTROL	All data is available externally via the ethernet connection
TEMPERATURE OPERATING, STORAGE	-5° C to +40° C, -30°C to +55° C
RECEIVER DIMENSION (DEPTH x HEIGHT)	533mm x 122mm
TRANSMITTER DIMENSION (DEPTH x HEIGHT)	412mm x 100mm
PROCESSOR DIMENSION (HEIGHT x WIDTH x DEPTH)	222mm x 483mm x 559mm



WHY CHOOSE A SEABAT 7112?

- Bottom mount or ship deployed
- 360° to provide complete sector coverage
- Covers a range of up to 1000m using a 100kHz frequency
- Services and Support Agreement (SSA)

For more details visit www.reson.com or contact your local RESON Office. RESON reserves the right to change specifications without notice. 2010©RESON

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