




# SeaBat<sup>®</sup> 7111

## MULTIBEAM ECHOSOUNDER SYSTEM

The SeaBat 7111 produces bathymetry data suitable for the generation of high resolution hydrographic charts exceeding international standards in water depths from 3 to 1000m. Operating at 100kHz, the system forms 101, 201 high-density, equi-angle or 301 equi-distant beams to cover a total receive sector of 150°.

The SeaBat 7111 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 7111 is controlled by a high performance sonar processor that manages data flow and signal processing using a state-of-the-art FPGA architecture. The sonar processor provides a Windows<sup>®</sup>-based GUI user interface, allowing system configuration, control, data output, storage and built-in test environment (BITE) displays to assist the operator.

Equi-distant or equi-angular beam spacing across the entire swath is selectable by the operator to provide uniform sounding density and maximize usable outer swath. Data outputs include bathymetry, sidescan, snippets & beam-formed water column data.

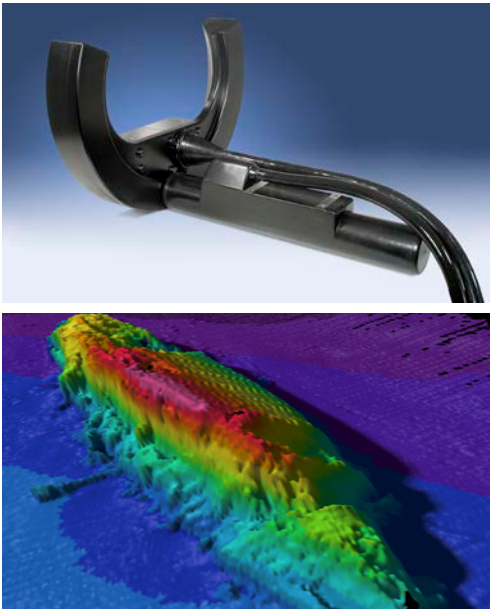
## PRODUCT LOGBOOK



INSTALLATION	Unique portable system
MOUNTING	Suitable for vessel over-the-side, bow or hull mounting
FREQUENCY	100kHz frequency
BEAMS	101, 201 EA / 301 ED focused beams
SWATH	150° swath coverage (7.5X depth)
BATHMETRY	Bathymetry & imagery from 3m to 1000m
OPERATION	Automatic operation
STABILISATION	Pitch stabilisation
IHO	IHO compliant
OPTIONS	19" marine grade monitor
	1 TB external RAID drive
	SVP-70 sound velocity profiler with 25m cable
	Service & maintenance agreement
	7111 30m transducer cables
	7111 spares kit

## SEABAT 7111 SYSTEM SPECIFICATIONS

FREQUENCY	100kHz
PULSE LENGTH	0.08ms to 3.04ms (selectable)
TYPICAL DEPTH	1m to 900m
MAX DEPTH	1000m
DEPTH RESOLUTION, SECTOR COVERAGE,	3cm, 150°
NUMBER OF BEAMS	101, 201 EA or 301 ED
ALONG-TRACK, ACROSS-TRACK BEAMWIDTH	1.9° , 1.5° ± 0.05° (3.0°, 4.5°, 6.0° operator selectable)
BOTTOM DETECTION METHOD	Center-of-energy and phase-zero-crossing algorithm
PITCH STABILISATION	±10° (motion sensor required)
MAX UPDATE RATE	20Hz (range selection dependent)
SYSTEM SUPPLY	90 to 260 VAC 50/60 Hz, 350 W
SYSTEM CONTROL	Trackball or from ethernet
TEMPERATURE: OPERATING, STORAGE	-5°C to +40°C, -30° to 55°C
DATA OUTPUT	Gigabit ethernet
TRANSDUCER ARRAY: WEIGHT	72kg (air), 59 kg (water) with cables
SONAR PROCESSOR: DIMENSIONS, WEIGHT	431.4mm x 220.8mm x 559.5mm, 30kg
TRANSCIVER: DIMENSIONS &, WEIGHT	267mm x 483mm x 489mm, 13.6kg
HYDROPHONE & PROJECTOR DIMENSIONS	636mm x 118mm (Diameter/ Length), 113mm x 650mm (Diameter/Length)
CABLE LENGTH	15m, 30m (optional)



### WHY CHOOSE A SEABAT 7111 SYSTEM?

- Lightweight and portable system, which can be installed temporarily over the side of a vessel
- Sidescan and snippet, assisting with determination of detected features
- Advanced signal processing and bottom detect routines deliver second-to-none data quality
- Services and Support Agreement (SSA)

For more details visit [www.reson.com](http://www.reson.com) or contact your local RESON Office. RESON reserves the right to change specifications without notice. 2011©RESON

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