PLD13774-4

RESON

EXPEDITION READY

SeaBat® 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®-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.

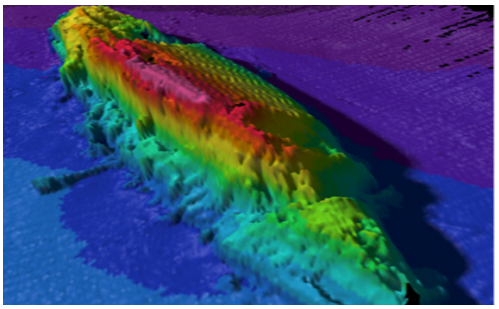
PRODUCT LOGBOOK

RESON

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	Bathmetry & 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
TRANSCEIVER: 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 or contact your local RESON Office. RESON reserves the right to change specifications without notice. 2011©RESON

RESON A/S
Denmark
Tel: +45 4738 0022
reson@reson.com

RESON Inc.
U.S.A.
Tel: +1 805 964-6260
sales@reson.com

RESON OFFSHORE Ltd.
Scotland U.K.
Tel: +44 1224 709 900
sales@reson.co.uk

RESON GmbH
Germany
Tel: +49 (0) 431 720 7180
reson@reson-gmbh.de

RESON B.V.
The Netherlands
Tel: +31 (0) 10 245 1500
info@reson.nl

RESON Pte. Ltd.
Singapore
Tel: +65 6725 9851
singapore@reson.com