



# SeaBat® 7125

## ULTRA HIGH RESOLUTION MULTIBEAM ECHOSOUNDER

The new generation SeaBat 7125 builds on the field experience and feedback from many users around the world and brings unparalleled resolution and installation flexibility. The system is available in three separate configurations; one designed specifically for installation on small survey vessels and a 6000m depth rated system for either ROV or AUV use.

Each of these configurations utilise the same transducer set and provide identical high performance, superlative data quality, features and ease of use over depths from 0.5m to 500m.

Special emphasis has been put on maximizing operational efficiency and features such as variable swath width and roll stabilisation combined with a high ping rate and excellent data quality.

### Surface Vessel Installation - SV2

The new SeaBat 7125-SV2 is a highly integrated single or dual frequency system designed with ease of installation and operation as a high priority. The system consists of a surface transceiver with integrated multiport card and a standard 25m cable run to the transducers. The transceiver hardware is suitable for running data acquisition software and is available with RESON PDS2000 software pre-installed and configured.

### ROV2

For deep-water use the ROV version of the SeaBat 7125 has a 6000m depth rating and includes a 6000m rated titanium interface bottle. The system performance and feature set is identical to the other members of the 7125 family thus providing commonality and ease of use.

## PRODUCT LOGBOOK



BEAM DENSITY	512 beams and equi-distant footprints providing extremely high density and maximizing swath width
ROLL STABILIZATION	Real-time roll stabilization maximizing usable swath
DEPTH	Dual frequency provides seamless coverage from 0.5 to 400m typical depth
IHO	Compliance with IHO SP44Ed5 over entire depth range
DIAGNOSTICS	Advanced diagnostics
HIGH SPEED	High ping rate allows high-speed operations without compromising data density

### AUV

The AUV version of the 7125 provides on-board data processing and logging as well as interface to third party sensors. The electronics are supplied mounted on an aluminium frame for ease of integration and an optional 6000m depth-rated titanium electronics housing is available. The 7125-AUV provides high quality data and performance commensurate with the other versions of the 7125.

## SEABAT 7125 SYSTEM SPECIFICATIONS

	<b>7125 SV2</b>	<b>7125 ROV2</b>	<b>7125 AUV</b>
POWER REQUIREMENT	111/220 VAC, 50/60 Hz 500W average	48V DC ( $\pm 10\%$ ) 110W max	48V DC ( $\pm 10\%$ ) 200W max
TRANSDUCER CABLE LENGTH	25m standard	3m standard 10m optional	3m standard 10m optional
LCU TO PROCESSOR CABLE LENGTH	N/A	25m (ST), 6m, 5m (pigtail)	N/A
SYSTEM DEPTH RATING	25m	6000m	6000m optional
FREQUENCY	200kHz or 400kHz (dual frequency available)		
ALONG-TRACK TRANSMIT BEAMWIDTH	2° at 200kHz & 1° at 400kHz		
ACROSS-TRACK RECEIVE BEAMWIDTH	1° at 200kHz & 0.5° at 400kHz		
MAX PING RATE	50Hz ( $\pm 1$ Hz)		
PULSE LENGTH	33 $\mu$ sec to 300 $\mu$ sec		
NUMBER OF BEAMS	512EA/ED at 400kHz, 256EA/ED at 200kHz		
MAX SWATH ANGLE	140° (165°)		
TYPICAL DEPTH	0.5m to 150m at 400kHz, 0.5m to 400m at 200kHz		
MAX DEPTH	175m at 400kHz, 450m at 200kHz		
DEPTH RESOLUTION	6mm		
DATA OUTPUT	Bathmetry, sidescan and snippets 7K data format		
TEMPERATURE:	-2° to +35°C		
FLEXMODE:	Optional		

COMPONENT	<b>7125 SV2</b>	<b>7125 ROV2</b>	<b>7125 AUV</b>
EM 7216 RECEIVER	✓	✓	✓
TC 2181 DUAL FREQUENCY 200/ 400 kHz PROJECTOR	✓		
TC 2160 400kHz PROJECTOR		✓	✓
TC 2163 200kHz PROJECTOR (OPTIONAL)		✓	✓
7-LINK CONTROL UNIT		✓	
SONAR PROCESSOR UNIT WITH MONITOR, KEYBOARD AND POINTER DEVICE		✓	
SV TRANSCEIVER WITH MONITOR, KEYBOARD AND POINTER DEVICE	✓		
7-I INTEGRATED CONTROL AND PROCESSOR UNIT			✓

For more details visit [www.reson.com](http://www.reson.com) or contact your local RESON Office.

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	Height [mm]	Width [mm]	Depth [mm]	Weight [kg/air]	Weight [kg/water]
TC 2181 DF 200/ 400 kHz PROJECTOR	87	93	280	4.5	3.4
TC 2160 400 kHz PROJECTOR	77	62	285	2.7	1.7
TC 2163 200kHz PROJECTOR	115	100	280	7.5	5
EM 7216 200/400 kHz RECEIVER	137	496	102	10.7	5.7
SURFACE TRANSCIEVER	5U	19"	557	20	N/A
LCU BOTTLE	530	Ø174	N/A	15.7	5.2
ICPU FRAME	172	166	497	10	N/A
SONAR PROCESSOR	5U	19"	630	30	N/A

## OPTIONS:

Mounting Bracket with Fairing  
 SVP-70 sound velocity profiler with 25m cable  
 Extended warranty/ support & maintenance contracts  
 Fiber-optic conversion fro ROV installations  
 Full calibration (calibrated backscatter)  
 (includes 1 TB external RAID)



7125SV2



7125 ROV2

## WHY CHOOSE A SEABAT 7125 SYSTEM?

- Maximum Productivity during data collection
  - 165degree swath
  - Roll Stabilization
  - 512 EA/ED beams
- Uncompromised clean data sets
  - Quality Filters/flags
  - Interactive, Comprehensive GUI
  - Industry leading bottom detect methods
- Ease of Installation and Use
  - Auto Pilot
  - Single highly integrated topside transceiver
  - Integrated Multibeam acquisition and processing software
  - Extremely portable wet-end
- Maximum Operational Flexibility
  - 400 and 200kHz operation for seamless data collection form 0.5m to 500m
  - Variable and Steerable swath
  - Simultaneous output of bathymetry, Sidescan, Snippets backscatter, and raw water column data
  - Adaptive gates
  - Uncertainty Output

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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