

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 LOGI | BUUK |
|--------------------|-------------------------------|
| BEAM DENSITY | Up to 512 beams in selectable |
| | modes optimises operations fo |
| | any survey type |
| 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 |
| WATER COLUMN DATA | Allows collection of high |
| | density water column data for |
| | advanced processing |

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.











| | 7125 SV2 | 7125 ROV2 | 7125 AUV | | | |
|--------------------------------|---|----------------------------|----------------|--|--|--|
| POWER REQUIREMENT | 111/220 VAC, 50/60 Hz | 48V DC (±10%) | 48V DC (± 10%) | | | |
| | 500W average | 200W max | 110W max | | | |
| TRANSDUCER CABLE LENGTH | 25m standard | 3m standard | 3m standard | | | |
| | | 10m optional | 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 (±1Hz) | | | | | |
| PULSE LENGTH | 33µsec to 300µsec | | | | | |
| 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 | 7125 SV2 | 7125 ROV2 | 7125 AUV | |
|---|----------|--------------|--------------|--|
| EM 7216 RECEIVER | √ | ✓ | ✓ | |
| TC 2181 DUAL FREQUENCY 200/ 400 kHz PROJECTOR | √ | | | |
| TC 2160 400kHz PROJECTOR | | ✓ | ✓ | |
| TC 2163 200kHz PROJECTOR (OPTIONAL) | | \checkmark | ✓ | |
| 7-LINK CONTROL UNIT | | √ | | |
| SONAR PROCESSOR UNIT WITH MONITOR, | | \checkmark | | |
| KEYBOARD AND POINTER DEVICE | | | | |
| SV TRANSCEIVER WITH MONITOR, | J | | | |
| KEYBOARD AND POINTER DEVICE | | | | |
| 7-I INTEGRATED CONTROL AND PROCESSOR UNIT | | | \checkmark | |

For more details visit www.reson.com or contact your local RESON Office.

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SEABAT 7125 SYSTEM SPECIFICATIONS

| | 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 TRANSCEIVER | 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 probe with 25m cable Extended warranty/ support & maintenance contracts Fiber-optic conversion for ROV installations



7125SV2



WHY CHOOSE A SEABAT 7125 SYSTEM?

- Maximum Productivity during data collection
 - Up to 165 degree swath
 - Roll Stabilization
 - Up to 512 beams in operator selectable modes
- Uncompromised clean data sets
 - Quality Filters/flags
 - Interactive, Comprehensive GUI
 - Industry leading bottom detect methods
- Ease of Installation and Use
 - -Fully automatic operation
 - 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 from 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 or contact your local RESON Office. RESON reserves the right to change specifications without notice. 2011©RESON

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