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EXPEDITION READY

SeaBat® 7128

HIGH RESOLUTION FORWARD-LOOKING MULTIBEAM SONAR

The SeaBat 7128 is a high-resolution forward-looking sonar system operating at 200kHz or 400kHz that illuminates a wide 128° horizontal sector ahead of the sonar head assembly. The SeaBat 7128 may be mounted on a surface vessel, submarine, AUV or ROV and is available in depth ratings up to 6000 meters.

The SeaBat 7128 focused beams, high ping rate and bandwidth combine to provide the user with superior resolution and image quality. The use of multibeam sonar technology allows for nearly instantaneous update of the sonar image, which provides information to the user faster than mechanically scanned sonars.

The SeaBat 7128 is capable of producing digital beam data which may be stored for data archiving reporting or operator training. An external RAID array is offered as an option for large volume data storage.

The SeaBat 7128 makes full use of Commercial-off-the-Shelf (COTS) hardware and software to increase cost-effectiveness with a well defined path for future upgrades and expansion.

PRODUCT LOGBOOK

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RESOLUTION	Unparalleled resolution and installation flexibility
FREQUENCY	200kHz or 400kHz
HIGH SPEED	256 focused receive beams
BEAM WIDTH	0,5° beam width
UPDATE RATE	Up to 50Hz update rate (range selection dependent)
RANGE	Up to 500m using 200kHz
DEPTH RATING	Surface Vessel: 50m
	ROV: 400m or 6000m
OPTIONS	External RAID hard drive array for beam data recording
	Fiber-optic converter
	Comprehensive service and support agreement

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SEABAT 7128 SYSTEM SPECIFICATIONS

FREQUENCY	**200 kHz**	**400kHz**
RANGE (UP TO)	500m	200m
SECTOR COVERAGE	128°	128°
NUMBER OF HORIZONTAL BEAMS	256 Equi-angular	256 Equi-angular
HORIZONTAL BEAMWIDTH: TRANSMIT, RECEIVE	> 128°, 1.1 ° ± 0.05° (center)	> 128°, 0.54° ± 0.03° (center)
VERTICAL BEAMWIDTH: TRANSMIT	TC2162: 27° ± 3°; TC2179 24° ± 3°	TC2162: 31° ± 4°; TC2179: 25° ± 2°
VERTICAL BEAMWIDTH: RECEIVE	28.5° ± 3.5°	31° ± 3.5°
MAX UPDATE RATE	50Hz	50Hz
PULSE LENGTH (RANGE RESOLUTION)	33μsec to 300μsec (2.5cm)	33μsec to 300μsec (2.5cm)
SYSTEM DEPTH RATING: SURFACE VESSEL, ROV	50m, 400m or6000m	50m, 400m or 6000m
SYSTEM CONTROL	7128 Sonar Processor Unit (SPU)	
POWER REQUIREMENTS	48V DC, approx. 60W (processor), 110/220V AC 50/60Hz, 300W	
DATA TRANSFER	Ethernet, 1Gbit	
TEMPERATURE: OPERATING, STORAGE	-2°C to +45°C, -30°C to +55°C	
DIMENSIONS: TRANSMIT ARRAY, RECEIVE ARRAY [mm]	TC2162: 240 x 86 x 99; TC2179: 122.2 x 81.5 x 99.8; EM7216: 102 x 496 x 137	
WEIGHT: TRANSMIT ARRAYS	TC2162: 3.5kg (air) &1.7 kg (water); TC2179: 1.3 kg (air) & 0.3 kg (water)	
WEIGHT: RECEIVE ARRAY	10.6kg (air) & 5.5kg (water)	
SPU DIMENSION	19" x 5U (222.25mm) x 557mm (rack depth required 630mm)	
SPU WEIGHT	20kg	

SeaBat 7128 with deep water TC2162

SeaBat 7128 with shallow water TC2179

WHY CHOOSE A SEABAT 7128?

- Unique combination of wide sector coverage and narrow beamwidth to support applications including MCM, classification of underwater intruders or support of offshore construction

- Robust COTS hardware for demanding offshore or naval operations

- 200kHz for long range, 400kHz for high resolution

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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