Seabed Portable Lightweight Multibeam Set

SEABED

Seabed has introduced the first lightweight multibeam set in the world than can be transported as check-in luggage with any airline with no extra charge. The SPLMS is Ideal for project where rapid mobilization is required and where logistical challenges are considered due to the simple deployment.

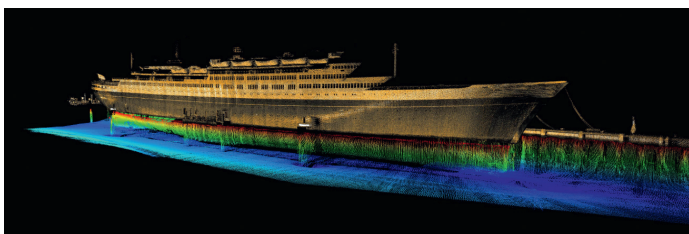## Set components

• Norbit WBMS

The ultra-compact wideband sonar has low power consumption. The new technology allows long range real time data collection whilst simultaneously achieving very high range resolution. The sonar has an integrated SV sensor and capabilities to record snippets, water column and side scan data.

• Seabed SGR7-D Sx Fully integrated GNSS Receiver

From standalone meter-level to RTK centimeter level positioning, the SGR7 is flexible to meet your positioning needs. With an integrated 4G modem, gigabyte switch, onboard intelligence, INS ready, display, 555 channels and comprehensive support for all current GNSS signals, the SGR7 is a state of the art GNSS receiver.

• SBD-IMU-Sx

Using sensor fusion in bringing together two different but complementary technologies: GNSS positioning and inertial navigation. The absolute accuracy of GNSS positioning and the stability of inertial measurement unit (IMU) gyro and accelerometer measurement are tightly coupled to provide an exceptional 3D navigation solution that is stable and continuously available, even during periods when satellite signals are blocked.

• AML Base-X2 Sound velocity profiler

This rugged shallow water logging instrument is designed for profiling in coastal water, high speed 25Hz sampling ensures excellent data resolution. A great benefit is that the Base X2 connects through Wi-Fi with your PC and downloads the cast upon lifting the sensor out of the water.

• QPS QINSy

This is an integrate navigation system software package used extensively worldwide for acquiring and processing multibeam data. A template has been prepared for the usage of above mentioned equipment.

• Ruggedized Rimowa transport case

A lightweight Polycarbonat multiwheel case with electronic tag system and custom made reinforced inlay.

Set benefits

• Transportable as check in luggage by any airline (weight <25 kg)
• Full integrated and ready to use
• Rapidly deployable at any vessel
• Simple ethernet interface
• Low power consumption. The set can be operated for a full day on a car battery.
• ITAR Free

Seabed portable lightweight Multibeam set specifications

Seabed portable lightweight multibeam set

NORBIT WBMS Sonar		AML BASE-X2	
Swath Coverage	7-210° (shallow water IHO special order >155°)	**SV Xchange**	Range: 1375 to 1625 m/s
Range Resolution	<10mm (accoustic)		Precision: +/-0,006 m/s
Number of beams	256/512 EA & ED		Accuracy: +/-0,025 m/s
Operating Frequency	400kHz w/80kHz bandwith	**P Xchange**	Up to 100 dBar
	(Freq. Agility 200-700kHz) (low freq. mode and		Precision: +/-0,03%FS
	high freg. ultra resolution mode)		Accuracy: +/-0,05%FS
Ping Rate	Up to 50Hz, adaptive	**Depth**	100m
Depth Range	0.2-275m (160m typical)	**Input Voltage**	7,5 to 26 VDC
Resolution	0.9° across, 1.9° along @400kHz. Option: along 0.9°,	**Operating Temperature**	"-20° C to +45° C
Voltage	10-28VDC or 100-240VAC (ROV direct: 22-29VDC)	**Operating Time**	12 Hours
Interface	Ethernet	**Scan**	Up to 25 HZ
Standard Cable Length	8m split cable	**Communications**	WIFI, RS-232, RS-485
SGR7-D-Sx		SBD-IMU-Sx	
Dual antenna	GGL L1 L2	**Heading Accuracy**	0,01 Degree
Position Accuracy	0.01m + 1ppm (RTK mode)	**Pitch/Roll Accuracy**	0,01 Degree (based on S2)
Maximum Data Rate	Up to 100Hz (depending on IMU)	**Heave (Instantaneous)**	5cm or 5%
Time Accuracy	20ns RMS	**Heave (Post Processed)**	3,5cm or 3,5% W.I.E.
Input Voltage	+9to+36v	**Waterproof**	30m
Interface	2x ethernet, 3x serial com, IMU and I/O		
Memory	16 GB Onboard Memory		

Power consumption complete set 58.2W

Dimensions: 400 x 370 x 720 mm
Colour: Black
Wheels: Yes
Total Weight 22,5kg

QINSy hydrographic data acquisition, navigation and processing software package

Optional: QINSy Qimera, Qinsy SSS add on
Optional: Z300 Lidar
Optional: Novatel Waypoint Inertial Explorer

Specifications are subject to change without prior notification.

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Getting to the bottom of things