

NORBIT - iWBMS TURNKEY MULTIBEAM SONAR SYSTEM

For High Resolution Bathymetry

Introducing the all-new, compact and high-resolution curved array bathymetric mapping system by NORBIT.

This all-in-one tightly integrated broadband multibeam turnkey solution offers high resolution bathymetry over a wide swath. The high-end sonar with globally leading GNSS/Inertial Navigation System embedded into the unit ensures fast and reliable mobilization and highest quality sounding for installations in all conditions.

The WBMS-series are based on a flexible sonar platform that utilizes the latest in analog and digital signal processing. With broad R&D expertise NORBIT has developed, from the ground-up, exciting new technology that allows existing and new applications to benefit from the advantages offered by a compact wideband curved-array multibeam sonar.



Features

- ✓ State-Of-The-Art Curved Array Multibeam Sonar Tightly Integrated with High-end GNSS-aided Inertial Navigation System
- ✓ 80kHz Bandwidth
- ✓ Roll-stabilisation, Side-scan, Water Column, Backscatter, Snippets
- ✓ Simple Ethernet Interface
- ✓ Integrated Sound Velocity Probe
- ✓ Hydrodynamic Fairing
- ✓ Mounting Bracket Included
- ✓ FM & CW Processing
- ✓ Flexible Power
- ✓ Exceeds IHO *Special Order*, CHS *Exclusive Order* & USACE *New Work*

Applications

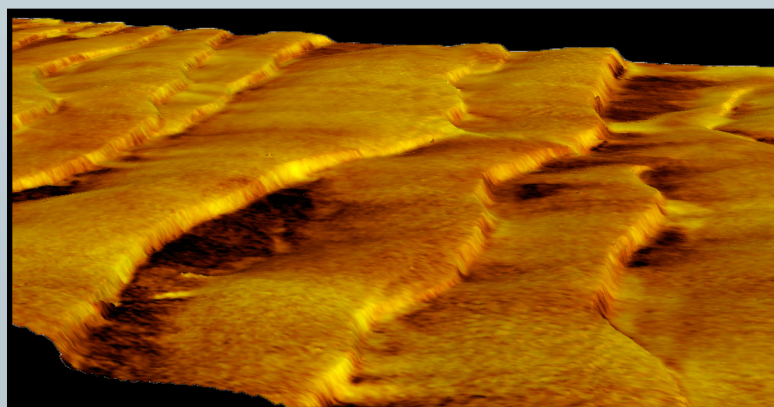
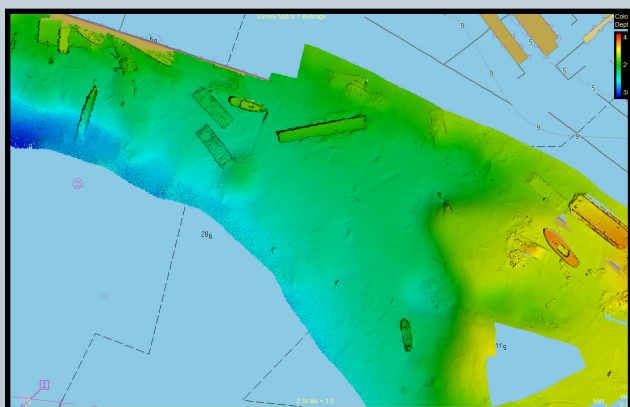
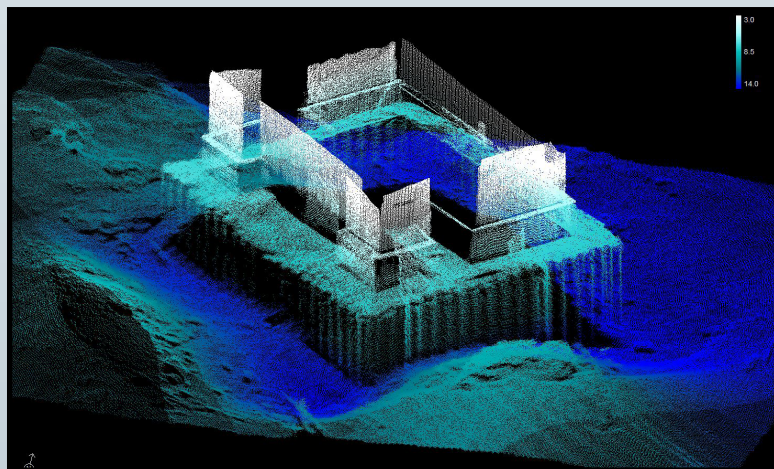
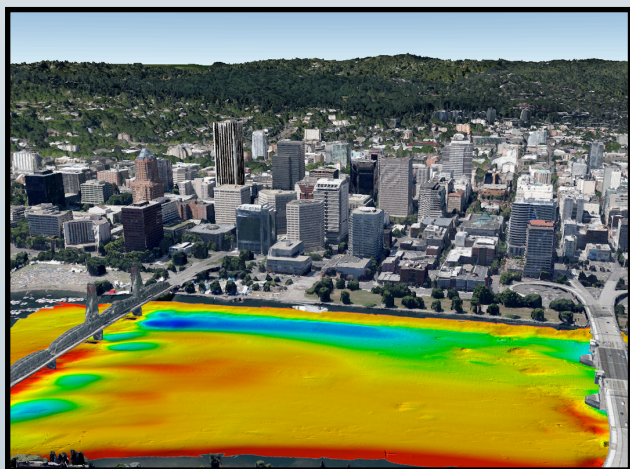
- ✓ Shallow Water Bathymetry
- ✓ Pipeline Surveys
- ✓ Pond, River and Estuary Surveys
- ✓ Harbor and Lake Surveys
- ✓ USV & UUV
- ✓ MCM & Littoral Combat Zone Surveys
- ✓ Open Ocean Coastal Surveys

Options

- ✓ Senior Hydrographer For Support and Training
- ✓ Sound Velocity Profiler
- ✓ Laptop
- ✓ Turnkey Survey Solutions
- ✓ Permanent Hull Mount Option
- ✓ Pole Mount and Travel Option
- ✓ 200kHz Version
- ✓ Narrow Beam Along Track 0.9°
- ✓ Top-end INS (Roll, Pitch & Heading 0.01degree)
- ✓ Entry level INS
- ✓ Acquisition, Navigation and Post Processing Software
- ✓ Can be Delivered with all Major Software Packages e.g. HYPACK, QINSy, EIVA, CARIS and Others

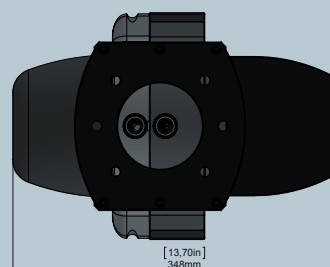
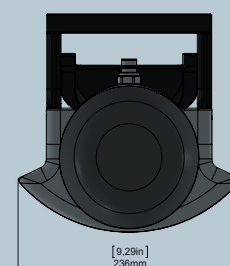
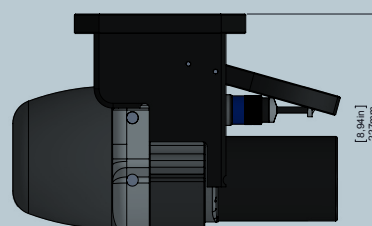
EXPERTS in sensor equipment providing telemetry and communication solutions for harsh environments.
NORBIT develops and delivers innovative products - allowing you to explore more.

NORBIT iWBMS Wideband Multibeam Sonar For High Resolution Bathymetry



TECHNICAL SPECIFICATION

SWATH COVERAGE	7-210° (SHALLOW WATER IHO SPECIAL ORDER >155°)
RANGE RESOLUTION	<10mm (ACOUSTIC)
NUMBER OF BEAMS	256-512 EA & ED
OPERATING FREQUENCY	400kHz w/80kHz BANDWIDTH (FREQ. AGILITY 200-700kHz) (LOW FREQ MODE AND HIGH FREQ ULTRA RESOLUTION MODE)
DEPTH RANGE	0.2-275m (160m TYPICAL)
PING RATE	UP TO 50HZ, ADAPTIVE
RESOLUTION	0.9° ACROSS, 1.9° ALONG @400kHz. OPTION: ALONG 0.9° 0.5° ACROSS, 0.9° ALONG @700KHZ
POSITION	HOR: ±(8MM +1PPM X DISTANCE FROM RTK STATION) VER: ±(15MM +1PPM X DISTANCE FROM RTK STATION) (ASSUMES 1M GNSS SEPARATION)
HEADING ACCURACY	0.03° (RTK) WITH 2m ANTENNA SEPARATION
PITCH/ROLL ACCURACY	0.02° INDEPENDENT OF ANTENNA SEPARATION
HEAVE ACCURACY	5cm or 5% (2cm RTK)
WEIGHT	APPROX. 9.5kg (AIR) LESS THAN 6kg (WATER)
INTERFACE	ETHERNET
CABLE LENGTH	STD 8m, OPTIONS: 25m, PIGTAIL, CUSTOM UP TO 50m
POWER CONSUMPTION	60W (75W MAX) (10-28VDC, 110-240VAC)
OPERATING TEMPERATURE	-4°C to +40°C (TOPSIDE -20°C to +55°C)
STORAGE TEMPERATURE	-20°C to +60°C
ENVIRONMENTAL	TOPSIDE: IP67: DUST TIGHT, PROTECTED AGAINST THE EFFECT OF IMMERSION UP TO 1m/WET-END: 100m



Part #12004

NORBIT SUBSEA | STIKLESTADVEIEN 11 | N-7041 TRONDHEIM | NORWAY | PHONE +47 73 98 25 50 | subsea@norbit.com

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