



NORBIT - iWBMSc (COMPACT) WIDEBAND MULTIBEAM SONAR

With Tightly Integrated INS

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

The 400kHz integrated multibeam solution offers high resolution in conjunction with the smallest possible tightly coupled INS/GNSS solution inertial navigation system for the most compact high resolution multibeam system. Having the inertial navigation system integrated into the sonar, ensures fast and reliable mobilization.

The WBMS-series are based on a flexible sonar platform that utilizes the latest in analog and digital signal processing, and features a curved array. 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

- ✓ Multibeam Sonar Integrated with IMU and GPS
- ✓ State Of The Art GNSS-aided Inertial Navigation System
- ✓ 80kHz Bandwidth
- ✓ Simple Ethernet Interface
- ✓ Integrated Sound Velocity Probe
- ✓ Hydrodynamic Fairing & Mounting Bracket Included
- ✓ FM & CW Transmissions
- ✓ Side-Scan, Water Column, Backscatter
- ✓ Exceeds IHO Special Order, CHS Exclusive Order & USACE New Work

Applications

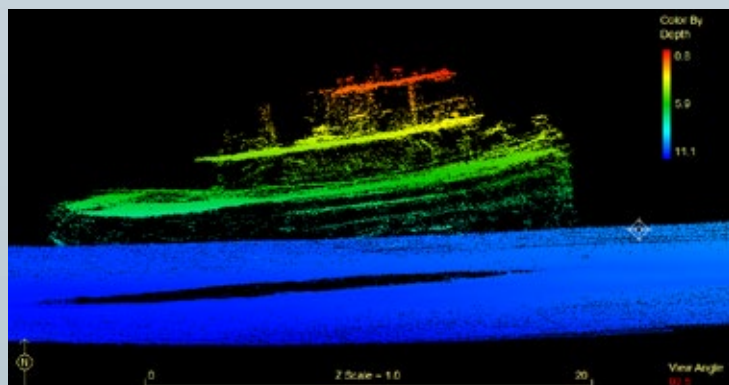
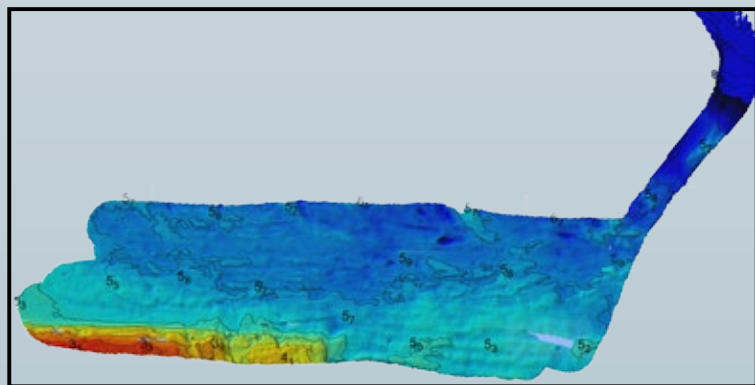
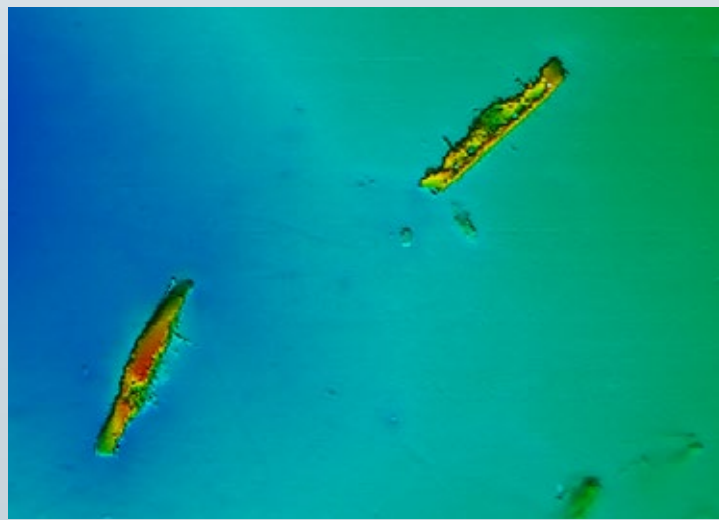
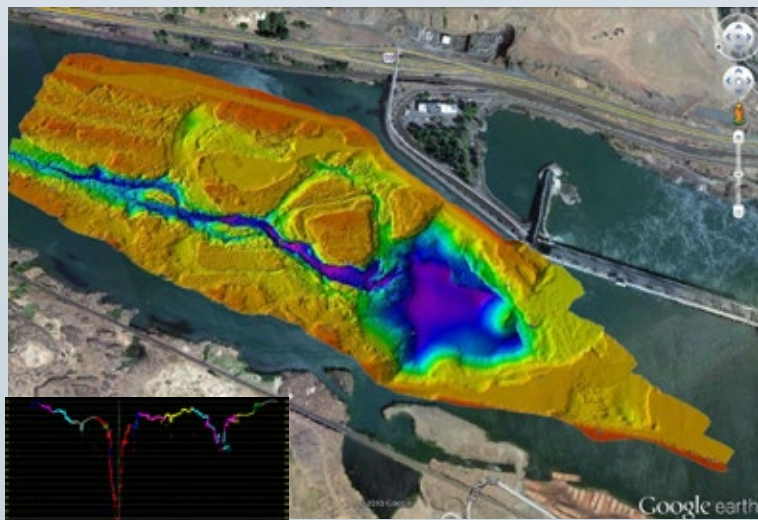
- ✓ Shallow Water Bathymetry
- ✓ Pipeline Surveys
- ✓ River, Estuary and Pond Surveys
- ✓ Harbor and Lake Surveys
- ✓ USV, UUV, AUV & ROV
- ✓ MCM & Littoral Combat Zone Surveys

Options

- ✓ Senior Hydrographer Support and Training
- ✓ Navigation Post Processing Software
- ✓ Sound Velocity Profiler
- ✓ Acquisition and Processing Software
- ✓ Turn-Key Survey Platform
- ✓ Laptop
- ✓ Permanent Hull Mount Option
- ✓ Pole Mount and Travel Option
- ✓ 200kHz Version
- ✓ Narrow Beam Along Track 0.9°

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

NORBIT Compact Wideband Multibeam Sonar For Turnkey High Resolution Bathymetry



TECHNICAL SPECIFICATIONS

SWATH COVERAGE	7-179° (140° NOMINAL)
RANGE RESOLUTION	<10mm (ACOUSTIC)
NUMBER OF BEAMS	256-512 EA & ED
OPERATING FREQUENCY	400kHz w/ 80kHz BANDWIDTH (200-700kHz POSSIBLE)
DEPTH RANGE	0.2-275m (160m TYPICAL)
PING RATE	UP TO 50Hz, RANGE DEPENDENT
RESOLUTION	0.9° ACROSS TRACK, 1.9° ALONG TRACK @400kHz
POSITION ACCURACY	0.02-0.1m (RTK)
HEADING RESOLUTION	0.03° (RTK) LONG BASELINE PP (0.08° SHORT BASELINE)
PITCH/ROLL ACCURACY	0.02° INDEPENDENT ON BASELINE
HEAVE ACCURACY	5cm OR 5% (2cm RTK)
WEIGHT	APPROX 8kg (AIR), 5kg (WATER)
INTERFACE	100Mb/s ETHERNET
STANDARD CABLE LENGTH	STD 8m, OPTIONS: 20m, pigtail, custom up to 50m
POWER CONSUMPTION	<40W (10-28VDC, 110-240VAC)
OPERATING/STORAGE TEMP.	-4°C TO +40°C (TOPSIDE -25°C TO +40°C) / -20°C TO +60°C

