

NORBIT*- explore more -*

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, Snippets
- ✓ Exceeds IHO *Special Order*, CHS *Exclusive Order* & USACE *New Work*

Applications

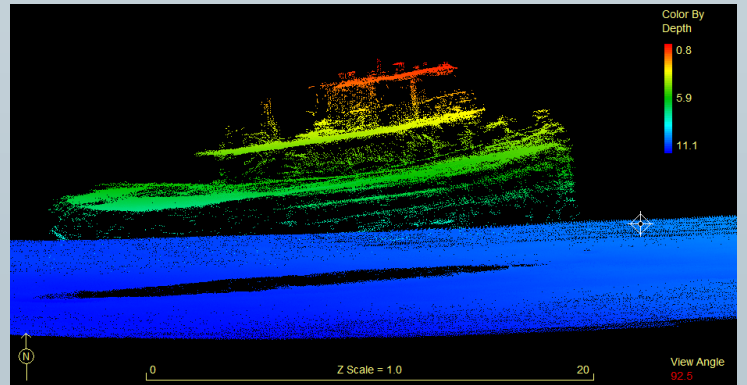
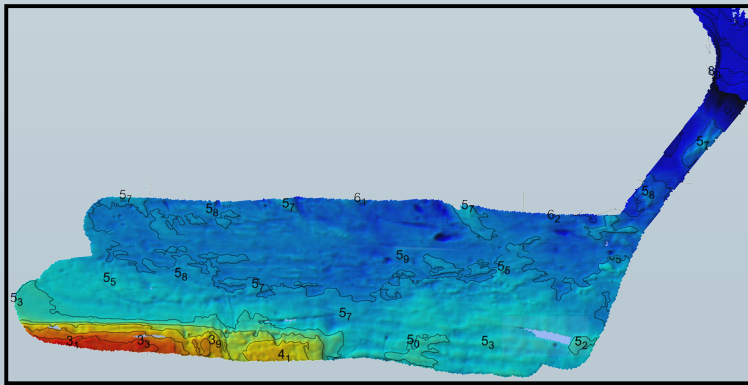
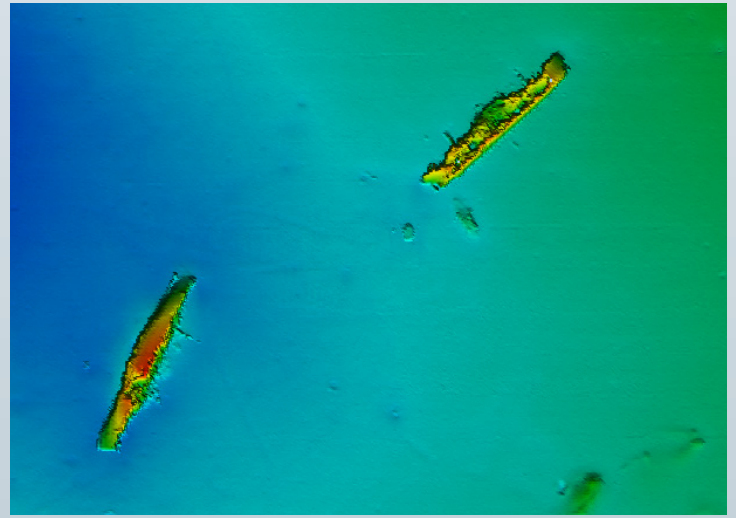
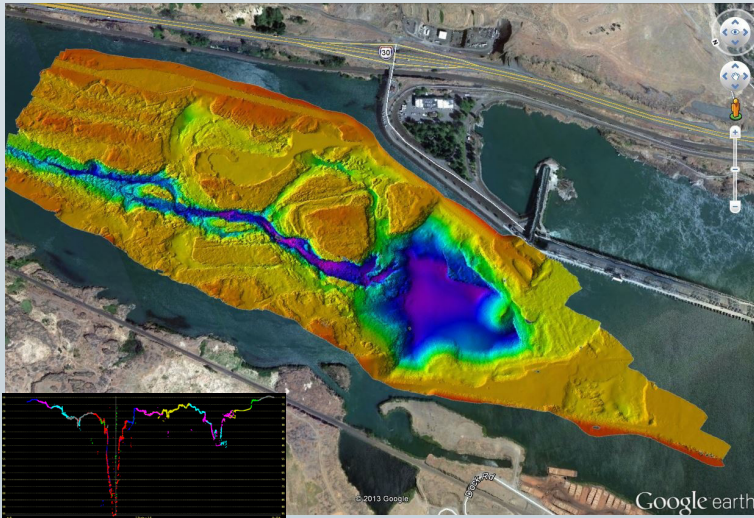
- ✓ Shallow Water Bathymetry
- ✓ Pipeline Surveys
- ✓ River, Estuary and Pond Surveys
- ✓ Harbor and Lake Surveys
- ✓ USV, UUV, AUV & ROV
- ✓ MCM & Littoral Combat Zone Surveys

Options

- ✓ Senior Hydrographer for Support and Training
- ✓ Sound Velocity Profiler
- ✓ Turn-Key Survey Platform
- ✓ Laptop
- ✓ Permanent Hull Mount Option
- ✓ Pole Mount and Travel Option
- ✓ 200kHz Version
- ✓ Narrow Beam Along Track 0.9°
- ✓ Acquisition, Navigation and Post Processing Software
- ✓ Can be Delivered with all Major Software Packages e.g. HYPACK, QINSy, EIVA, CARIS and Others

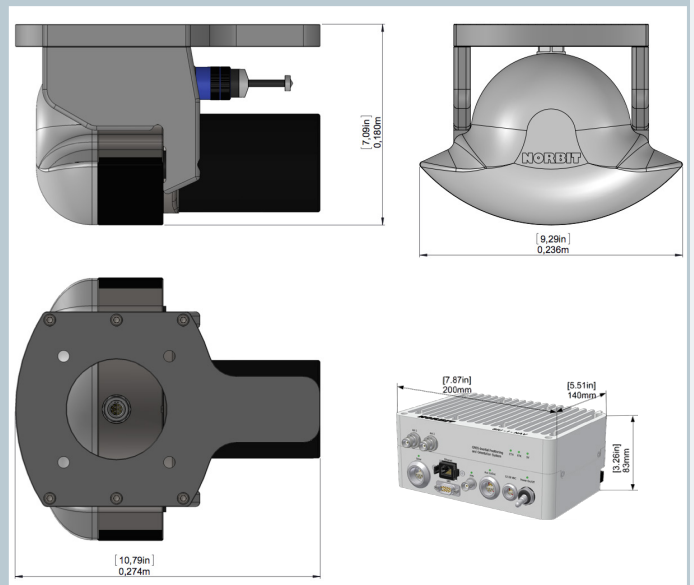
EXPERTS in Sensor equipment providing telemetry and communication solutions for harsh environments.
NORBIT develops and delivers innovative products - allowing you to explore more.

NORBIT Compact Wideband Multibeam Sonar With Tightly Integrated INS



TECHNICAL SPECIFICATIONS

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 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: 25m, PIGTAIL, CUSTOM UP TO 50m
POWER CONSUMPTION	45W AVERAGE (10-28VDC, 110-240VAC)
OPERATING TEMPERATURE	-4 °C to +40 °C (TOPSIDE -25 °C to +40 °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 #12005