

NORBIT - iWBMS TURNKEY MULTIBEAM SONAR SYSTEM

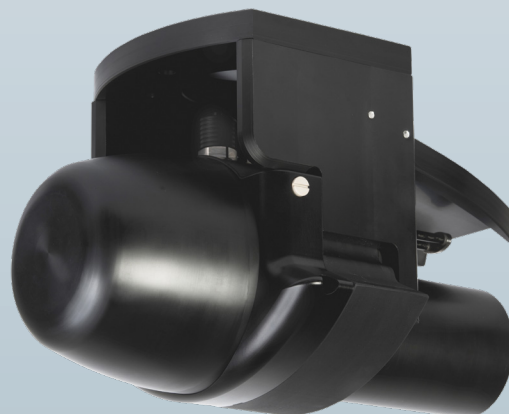
For High Resolution Bathymetry

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 Applanix WaveMaster II (globally leading GNSS/INS system) embedded into the unit ensures fast and reliable mobilisation and highest quality sounding for surveys in all conditions.

The WBMS-series are based on a flexible sonar platform that utilizes the latest in analogue 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.

Supported by DCT (NORBIT Integrated Data Acquisition Software) for efficient survey data acquisition.



Features

- ✓ Multibeam Sonar with Integrated Inertial Navigation System & Integrated NTRIP Client
- ✓ 80kHz Bandwidth
- ✓ Roll-stabilisation
- ✓ Backscatter Outputs (Intensity, Sidescan, Snippets, Water Column)
- ✓ Multidetect
- ✓ Simple Ethernet Interface
- ✓ Integrated Sound Velocity Probe
- ✓ Hydrodynamic Fairing
- ✓ Mounting Bracket Included
- ✓ FM & CW Processing
- ✓ Flexible Power
- ✓ Exceeds IHO Exclusive Order & USACE New Work

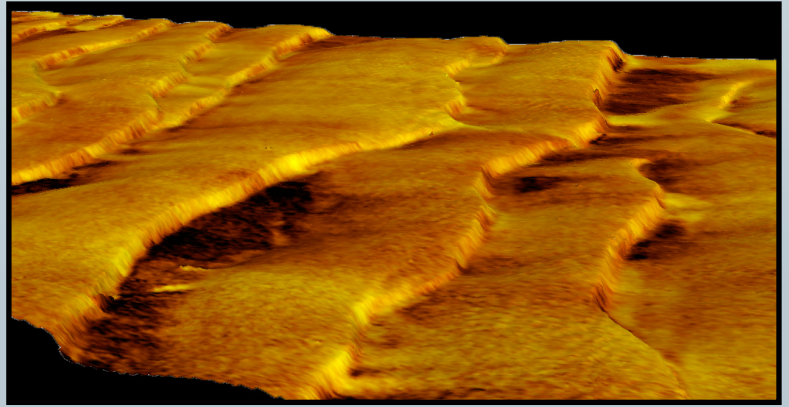
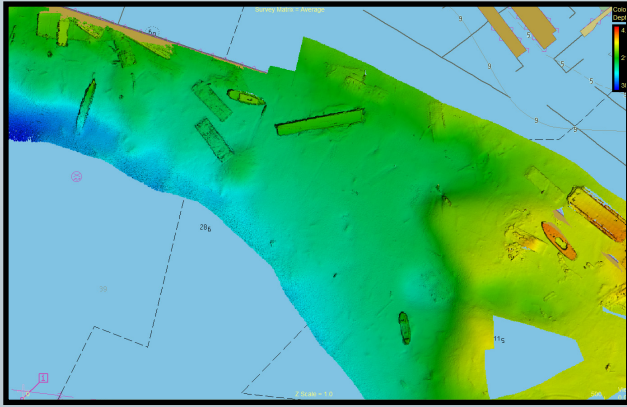
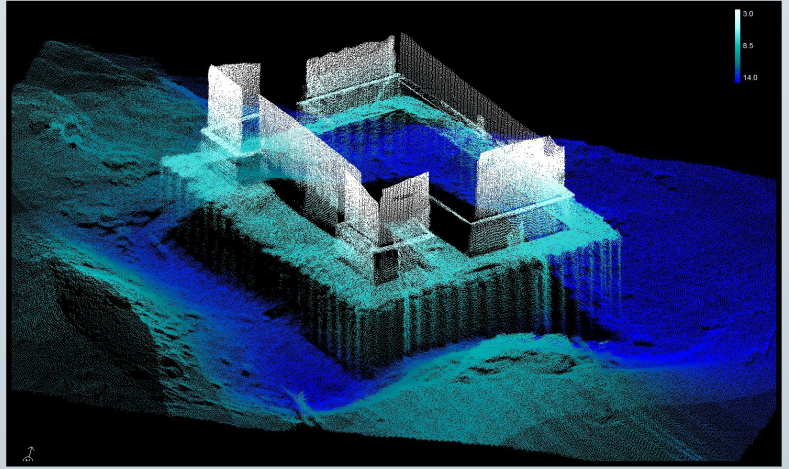
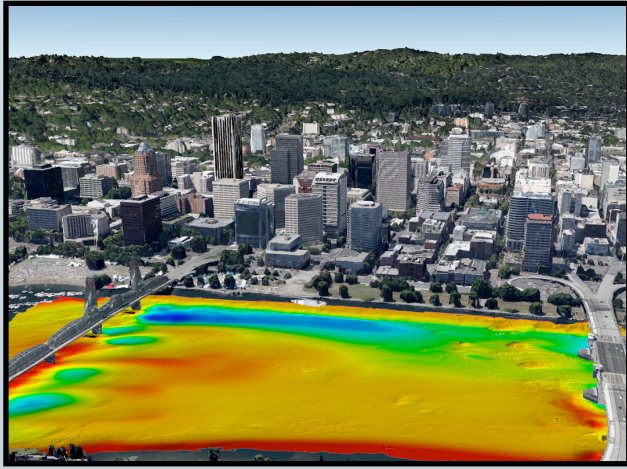
Applications

- ✓ Shallow Water Bathymetry
- ✓ Pipeline Surveys
- ✓ Pond, River and Estuary Surveys
- ✓ Harbour and Lake Surveys
- ✓ Unmanned Surface Applications (AUV or ASV)
- ✓ Coastal Surveys

Options

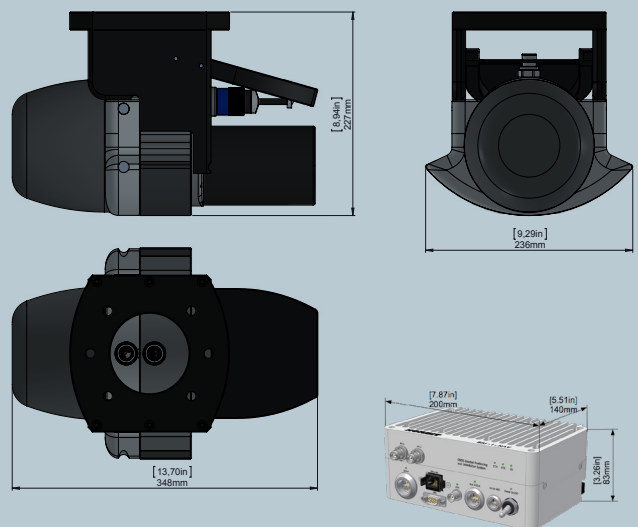
- ✓ Sound Velocity Profiler
- ✓ Data Acquisition Software (DCT)
- ✓ Turnkey Survey Solutions
- ✓ Pole and Permanent Hull Mount
- ✓ 200kHz Version
- ✓ Backscattering Strength Output
- ✓ Narrow Beam Option
- ✓ High-end INS (Applanix Ocean-Master iWBMSH)
- ✓ Acquisition, Navigation and Post Processing Software
- ✓ 1024 HDS
- ✓ Can be Delivered with Software Packages e.g. DCT, HYPACK, Qinsy, EIVA, CARIS and Others

NORBIT iWBMS Wideband Multibeam Sonar For High Resolution Bathymetry



TECHNICAL SPECIFICATION

| | |
|--------------------------------|---|
| SWATH COVERAGE | 5-210° FLEXIBLE SECTOR (SHALLOW WATER IHO SPECIAL ORDER >155°) |
| RANGE RESOLUTION | <10mm ACOUSTIC w. 80kHz BANDWIDTH |
| NUMBER OF BEAMS | 256-512 (1024 HDS) EA & ED |
| OPERATING FREQUENCY | NOMINAL FREQUENCY 400kHz (FREQUENCY AGILITY 200-700kHz) |
| DEPTH RANGE | 0.2-275m (>300m WITH 0.9° X 0.9° OPTION) |
| PING RATE | UP TO 60Hz, ADAPTIVE |
| RESOLUTION (ACROSS X ALONG) | STANDARD: 0.9° X 1.9° @400kHz AND 0.5° X 1.0° @700kHz. NARROW OPTION: 0.9° X 0.9° @400kHz AND 0.5° X 0.5° @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 | 2 cm OR 2% (TRUEHEAVE™), 5 cm OR 5% (REAL TIME) |
| WEIGHT | 8.5kg (AIR) 3.5kg (WATER) |
| INTERFACE | ETHERNET |
| CABLE LENGTH | STD 8m, OPT: 2m, 25m AND 50m |
| POWER CONSUMPTION | 60W (10-28VDC, 110-240VAC) |
| OPERATING TEMP. | -4°C to +40°C (TOPSIDE -20°C to +55°C) |
| STORAGE TEMP. | -20°C to +60°C |
| ENVIRONMENTAL | TOPSIDE: IP67: DUST TIGHT, PROTECTED AGAINST THE EFFECT OF IMMERSION UP TO 1m/WET-END (SONAR): 100m |



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