Introducing the all-new, compact and high-resolution Dual head 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 (Applanix OceanMaster) 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.

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<th>Features</th>
<th>Applications</th>
<th>Options</th>
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<td>✓ State-Of-The-Art Curved Array Multibeam Sonar Tightly Integrated with High-end GNSS-aided Inertial Navigation System (Applanix OceanMaster)</td>
<td>✓ Shallow Water Bathymetry</td>
<td>✓ Senior Hydrographer For Support and Training</td>
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<td>✓ 80kHz Bandwidth</td>
<td>✓ Pipeline Surveys</td>
<td>✓ Sound Velocity Profiler</td>
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<td>✓ Roll-stabilisation, Side-scan, Water Column, Backscatter, Snippets</td>
<td>✓ Pond, River and Estuary Surveys</td>
<td>✓ Laptop</td>
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<td>✓ Simple Ethernet Interface</td>
<td>✓ Harbor and Lake Surveys</td>
<td>✓ Turnkey Survey Solutions</td>
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<td>✓ Integrated Sound Velocity Probe</td>
<td>✓ USV &amp; UUV</td>
<td>✓ Permanent Hull Mount Option</td>
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<td>✓ Hydrodynamic Fairing</td>
<td>✓ MCM &amp; Littoral Combat Zone Surveys</td>
<td>✓ Pole Mount and Travel Option</td>
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<td>✓ Mounting Bracket Included</td>
<td>✓ Open Ocean Coastal Surveys</td>
<td>✓ 200kHz Version</td>
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<td>✓ FM &amp; CW Processing</td>
<td>✓ Flexible Power</td>
<td>✓ Narrow Beam Along Track 0.9°</td>
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<td>✓ Exceeds IHO Special Order, CHS Exclusive Order &amp; USACE New Work</td>
<td>✓ Top-end INS (Roll, Pitch &amp; Heading 0.01degree)</td>
<td>✓ Entry level INS</td>
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<td>✓ Acquisition, Navigation and Post Processing Software</td>
<td>✓ Can be Delivered with all Major Software Packages e.g. HYPACK, QINSy, EIVA, CARIS and Others</td>
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</table>

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

www.norbit.com
NORBiT iWBMSh 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**: 512-1024 EA & ED
- **OPERATING FREQUENCY**: NOMINAL FREQUENCY 400kHz (FREQUENCY AGILITY 200-700kHz)
- **DEPTH RANGE**: 0.2-275m (160m TYPICAL @400kHz)
- **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**: 0.02° (RTK) WITH 2m ANTENNA SEPARATION
- **PITCH/ROLL ACCURACY**: 0.01° INDEPENDENT OF ANTENNA SEPARATION
- **HEAVE ACCURACY**: 2 cm OR 2% (TRUEHEAVETM), 5 CM OR 5% (REAL TIME)
- **WEIGHT**: APPROX. 15kg (AIR) LESS THAN 9.5kg (WATER)
- **INTERFACE**: ETHERNET
- **CABLE LENGTH**: STD. 8m, OPT: 2m, 25m AND 50m
- **POWER CONSUMPTION**: 100W (160W MAX) (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 IMMERSSION UP TO 1m WET-END: 100m

Note: Sonar dimensions may vary depending on configuration.