

## WIDEBAND MULTIBEAM SONAR

### For High Resolution Bathymetry

Powerful, ultra compact and high-resolution multibeam sonar from NORBIT.

The WBMS series is the most compact sonars designed for use on all platforms. With low power consumption, the system is suitable to operate from battery. NORBIT's wideband multibeam technology facilitates long range real-time data collection and at the same time achieves high resolution data.

The WBMS sonars are based on a state of the art analogue and digital platform featuring powerful signal processing capabilities, offering roll stabilised bathymetry and several types of imagery and backscatter output. 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

- ✓ Sub-centimeter Range Resolution
- ✓ FM & CW Processing
- ✓ 80kHz Bandwidth
- ✓ Simple Ethernet Interface
- ✓ Roll-stabilisation
- ✓ Backscatter outputs (Intensity, Sidescan, Sidescan Snippets, Snippets, Water Column)
- ✓ Multidetect
- ✓ Integrated Sound Speed Probe
- ✓ Exceeds IHO *Special Order*, CHS *Exclusive Order* & USACE *New Work*

### Applications

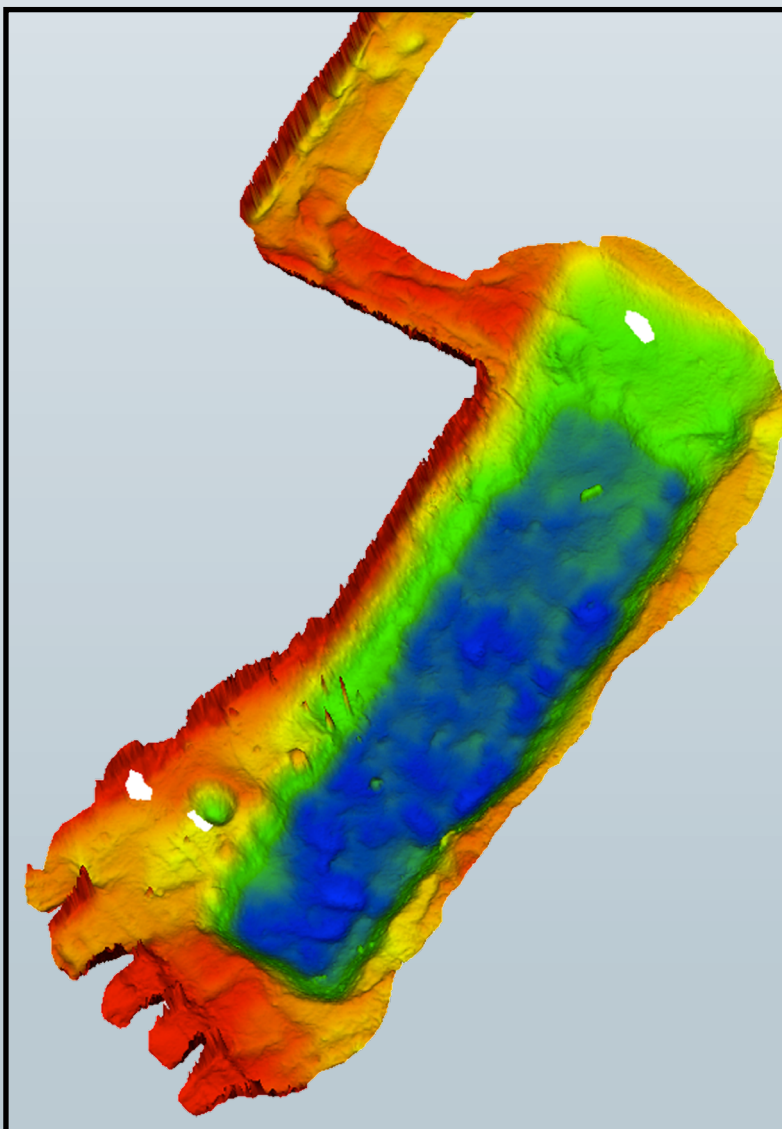
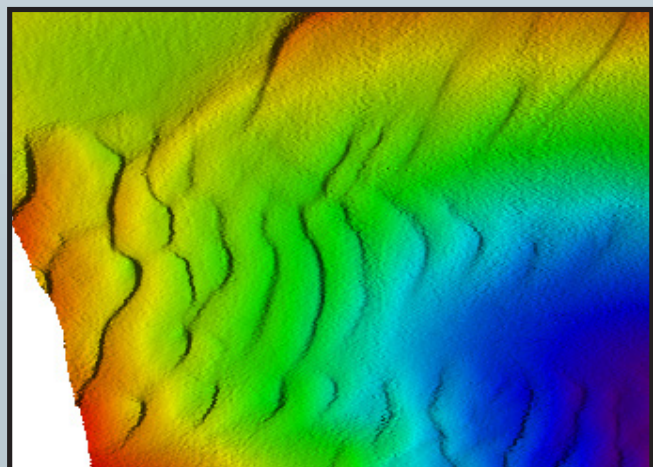
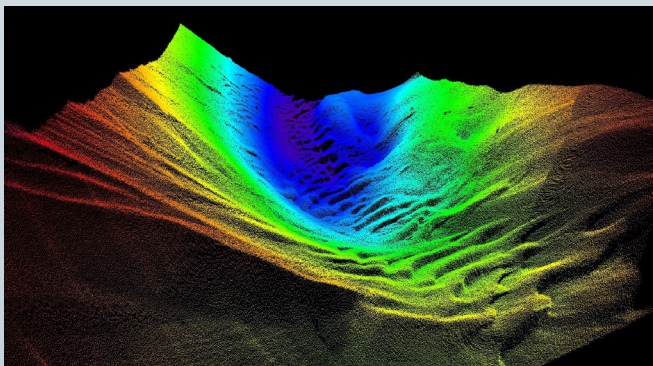
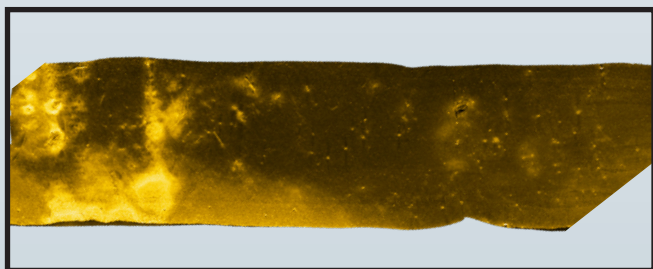
- ✓ Shallow Water Bathymetry
- ✓ Pipeline Surveys
- ✓ River, Estuary, Channel and Pond Surveys
- ✓ Harbor and Coastline Surveys
- ✓ USV, UUV, AUV & ROV Surveys

### Options

- ✓ 900m, 4500, 6000m Depth Rating
- ✓ Mounting Bracket
- ✓ Motion Sensor
- ✓ Data Acquisition Software
- ✓ Senior Hydrographer for Support and Training
- ✓ Turn-Key Survey Platform
- ✓ AUV Version
- ✓ VDSL Data Link
- ✓ Permanent Hull Mount Option
- ✓ Pole Mount and Travel Option
- ✓ 200kHz version
- ✓ Narrow Beam Along Track 0.9°

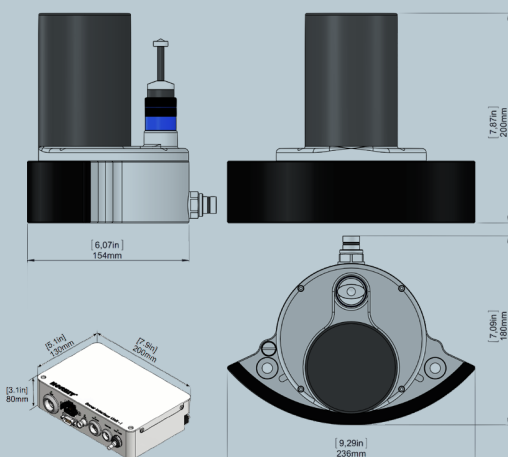
EXPERTS in sensor equipment providing telemetry and communication solutions for harsh environments. NORBIT develops and delivers innovative products - allowing you to explore more.

# NORBIT Wideband Multibeam Sonar For High Resolution Bathymetry



## TECHNICAL SPECIFICATIONS

|                                |  |
|--------------------------------|--|
| SWATH COVERAGE                 | 5-210° FLEXIBLE SECTOR (SHALLOW WATER IHO SPECIAL ORDER >155°)   |
| RANGE RESOLUTION               | <10mm (ACOUSTIC w. 80kHz BANDWIDTH)  |
| NUMBER OF BEAMS                | 256-512 EA & ED  |
| OPERATING FREQUENCY            | NOMINAL FREQUENCY 400kHz<br>(FREQUENCY AGILITY 200-700kHz)   |
| PING RATE                      | UP TO 60Hz, ADAPTIVE   |
| DEPTH RANGE                    | 0.2-275m (160m TYPICAL @ 400kHz)   |
| RESOLUTION<br>(ACROSS X ALONG) | STANDARD: 0.9° X 1.9° @400kHz AND 0.5° X 1.0° @700kHz.<br>NARROW OPTION: 0.9° X 0.9° @400kHz AND 0.5° X 0.5° @700kHz |
| WEIGHT                         | <4.5kg(AIR), 3kg(WATER)  |
| POWER CONSUMPTION              | 40W  |
| VOLTAGE                        | 10-28VDC OR 100-240VAC (ROV DIRECT: 24-29VDC)  |
| INTERFACE                      | ETHERNET   |
| STANDARD CABLE LENGTH          | STD. 8m, OPTION.: 2m, 25m, 50m, PIGTAIL, 600m WITH VDSL  |
| DEPTH RATING                   | 100m OPTIONAL: 900m, 4500m, 6000m<br>DEEP WATER (>100m) DESIGNED FOR UP TO 7m/s VEHICLE SPEED.                       |
| 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  |



Part # 12003-AACDB4