

## 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, Snippet Sidescan, Snippets, Water Column)
- ✓ Multidetect
- ✓ Integrated Sound Speed Probe
- ✓ Exceeds IHO *Special Order*, CHS *Exclusive Order* & USACE *New Work*

### Applications

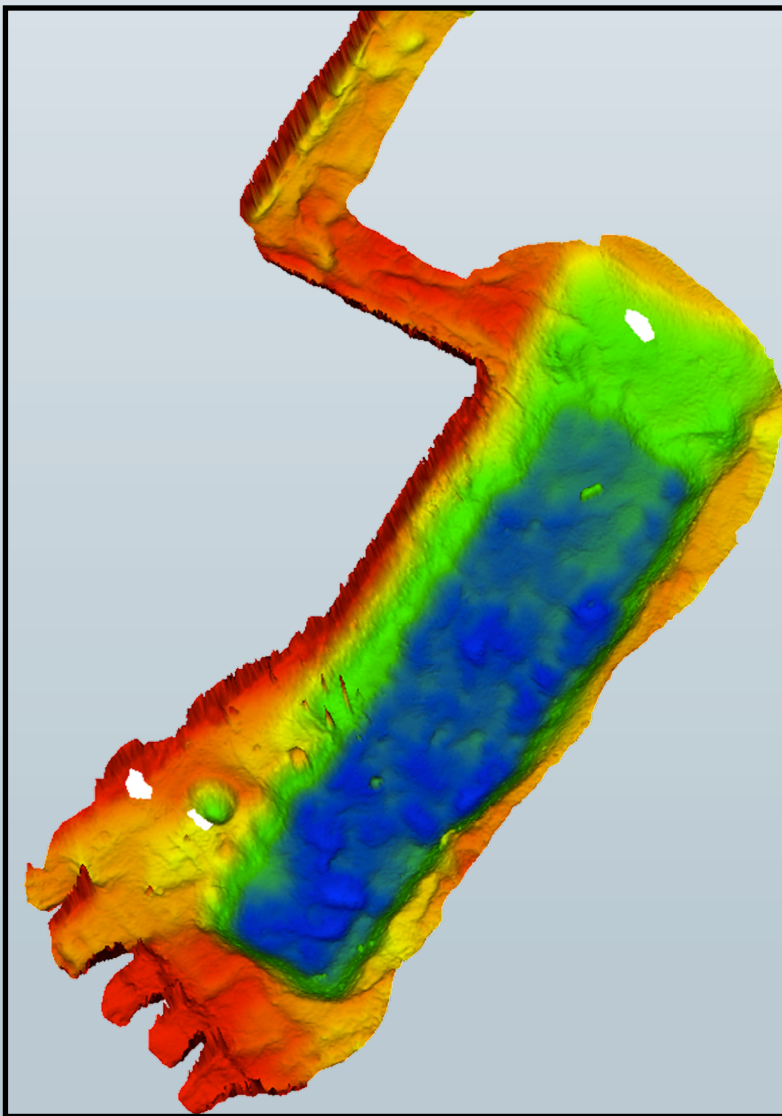
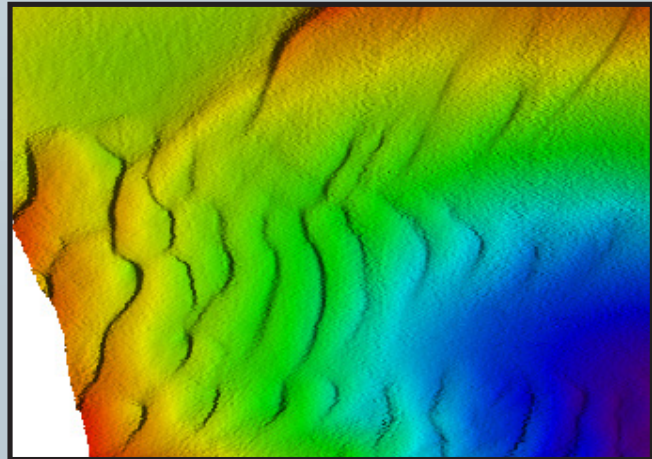
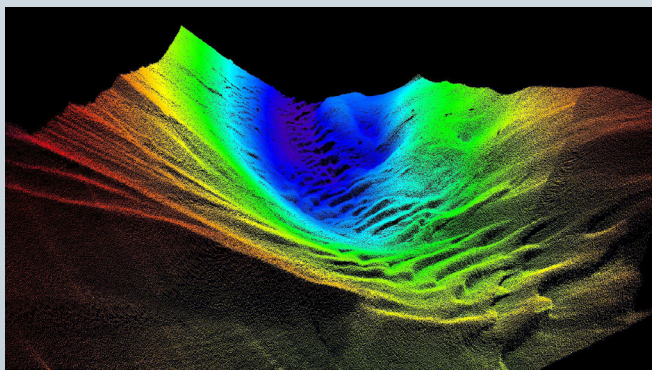
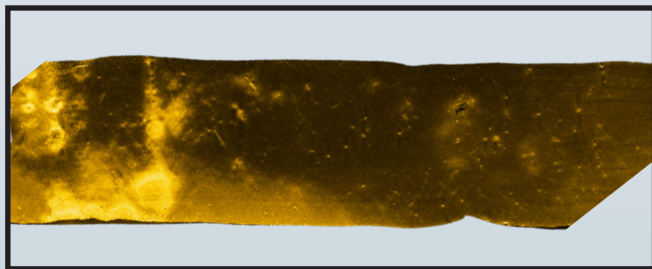
- ✓ Shallow Water Bathymetry
- ✓ Pipeline Surveys
- ✓ River, Estuary, Channel and Pond Surveys
- ✓ Harbor and Coastline Surveys
- ✓ USV, UUV, AUV & ROV Surveys

### Options

- ✓ 900m, 4500m, 6000m Depth Rating
- ✓ Mounting Bracket
- ✓ Motion Sensor
- ✓ Data Acquisition Software
- ✓ Turn-Key Survey Platform
- ✓ 200kHz FLS version
- ✓ 200kHz Bathy Version
- ✓ AUV Version
- ✓ VDSL Data Link
- ✓ Permanent Hull Mount and Pole Mount Options
- ✓ 1024 HDS
- ✓ Narrow Beam Along Track 0.9°

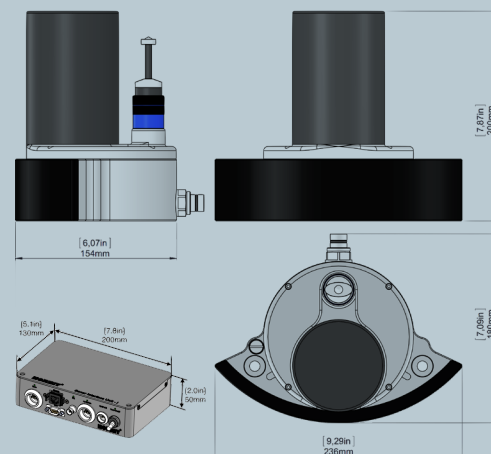
EXPERTS in sensor equipment providing telemetry and communication solutions for harsh environments.  
NORBIT develops and delivers innovative products - allowing you to explore more.

# NORBIT Wideband Multibeam Sonar For High Resolution Bathymetry



## TECHNICAL SPECIFICATIONS

SWATH COVERAGE	5-210° FLEXIBLE SECTOR (SHALLOW WATER IHO SPECIAL ORDER >155°)
DEPTH RESOLUTION	<10mm ACOUSTIC W. 80kHz BANDWIDTH
NUMBER OF BEAMS	256-512 (1024 HDS) EA & ED
OPERATING FREQUENCY	NOMINAL FREQUENCY 400kHz (FREQUENCY AGILITY 200-700kHz)
PING RATE	UP TO 60Hz, ADAPTIVE
DEPTH RANGE	0.1m-275m (160m TYPICAL @ 400kHz)
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
WEIGHT	<4.5kg(AIR), 3kg(WATER)
POWER CONSUMPTION	40W
VOLTAGE	10-28VDC OR 100-240VAC (ROV DIRECT: 24-29VDC)
SURVEY SPEED	MAX 7.2 kn WHEN USED ON ROV
INTERFACE	ETHERNET
STANDARD CABLE LENGTH	STD. 8m, OPTION.: 2m, 25m, 50m, PIGTAIL, 600m WITH VDSL
DEPTH RATING	100m OPTIONAL: 900m, 4500m, 6000m 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



Dimensions shown for standard version