



# WIDEBAND MULTIBEAM SONAR

For Long Range 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 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
- ✓ Flexible Power Source (10-28 VDC, 100-240 VAC)
- ✓ 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

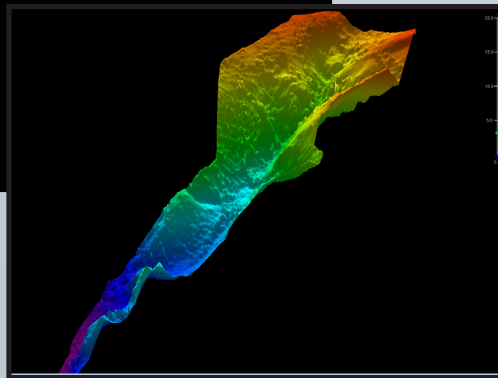
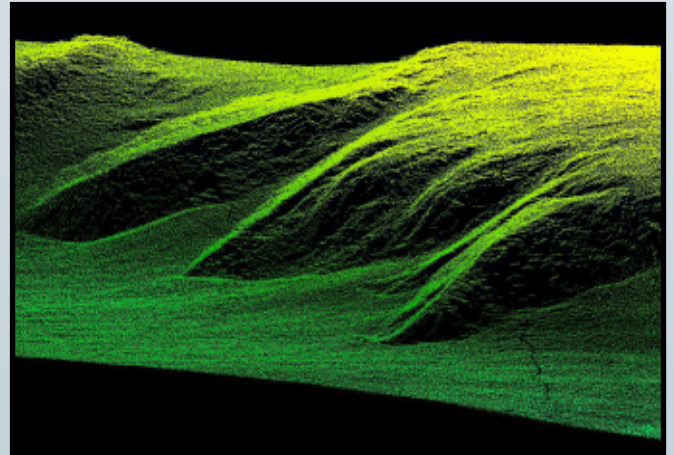
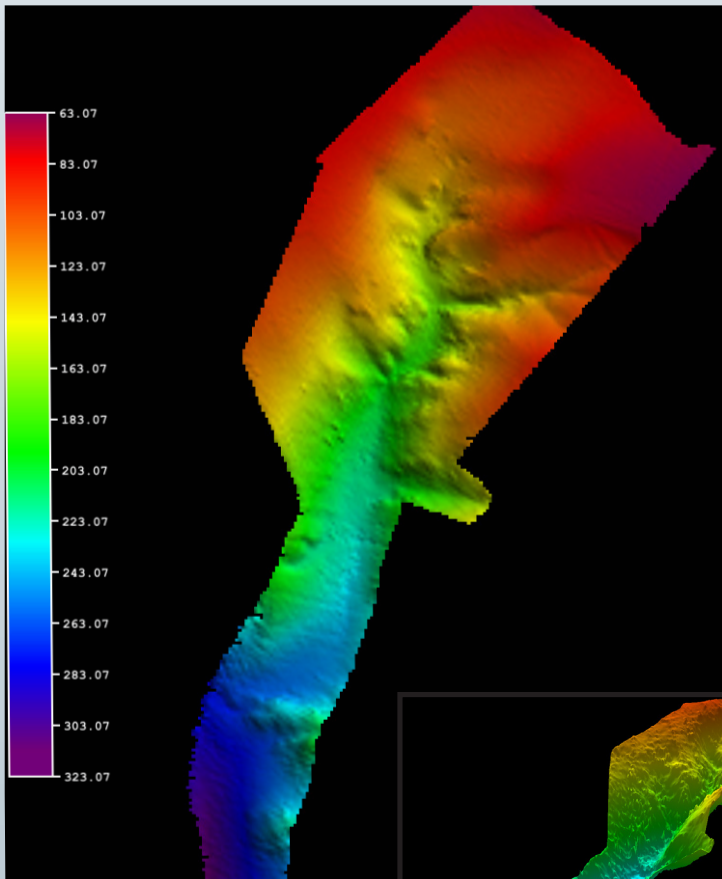
- ✓ 0.2 to 600m Bathymetry
- ✓ Pipeline Surveys
- ✓ River, Estuary, Channel and Pond Surveys
- ✓ Harbor and Coastline Surveys
- ✓ USV, UUV, AUV & ROV Surveys
- ✓ Integrated Inertial Navigation Solution

## Options

- ✓ 900m, 4500m and 6000m Depth Rating
- ✓ Motion Sensor
- ✓ Turn-Key Survey Platform
- ✓ AUV Version
- ✓ VDSL Data Link
- ✓ Pole and Hull Mount Options
- ✓ Narrow Beam Along Track 1.8°
- ✓ Integrated options: iWBMS, iWBMS<sub>e</sub> & iWBMS<sub>h</sub>
- ✓ 1024 HDS
- ✓ 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 Wideband Multibeam Sonar For High Resolution Bathymetry



## TECHNICAL SPECIFICATIONS

SWATH COVERAGE	5-215° FLEXIBLE SECTOR (SHALLOW WATER IHO SPECIAL ORDER >155°)
RANGE RESOLUTION	<20mm (ACOUSTIC w.80kHz BANDWIDTH)
NUMBER OF BEAMS	256-512 (HDS 1024) EA & ED
OPERATING FREQUENCY	NOMINAL FREQUENCY 200kHz (FREQUENCY AGILITY: 160-400kHz)
PING RATE	UP TO 60Hz, ADAPTIVE
DEPTH RANGE	0.2-600m
RESOLUTION (ACROSS X ALONG)	STANDARD: 1.8° X 1.8° @200kHz OPTION: 0.9° X 0.9° @400kHz
WEIGHT	<6.3kg(AIR), 3.1kg(WATER)
POWER CONSUMPTION	40W
VOLTAGE	10-28VDC OR 100-240VAC (ROV DIRECT: 24-29VDC)
INTERFACE	100Mb/s ETHERNET
STANDARD CABLE LENGTH	STD. 8m, OPT.: 2m, 25m, 50m, PIGTAIL, 600m WITH VDSL
DEPTH RATING	100m OPTIONAL: 900m, 4500m and 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

