

# NORBIT - iWBMSH-Dual Head TURNKEY MULTIBEAM SONAR SYSTEM

For High Resolution Bathymetry

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 mobilisation and highest quality sounding for installations in all conditions.

The WBMS-series are based on a flexible sonar platform that utilises 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.



## Features

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

## Applications

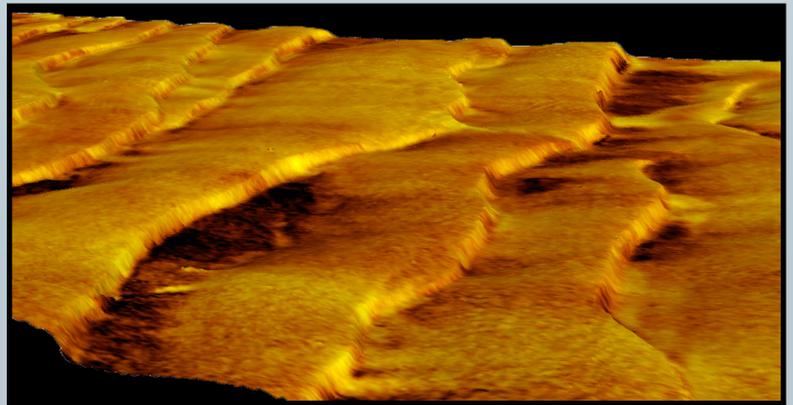
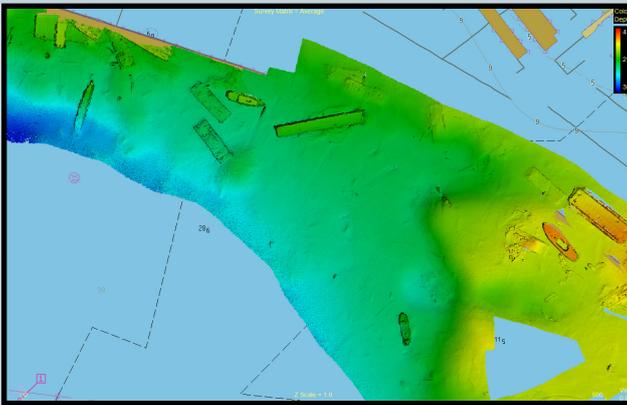
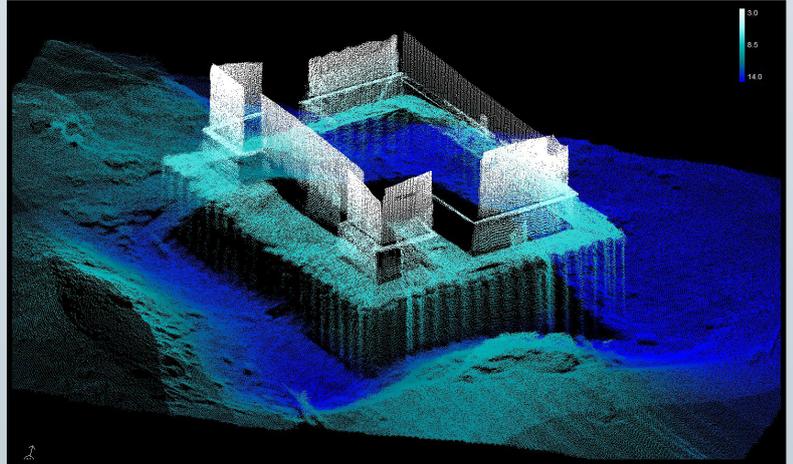
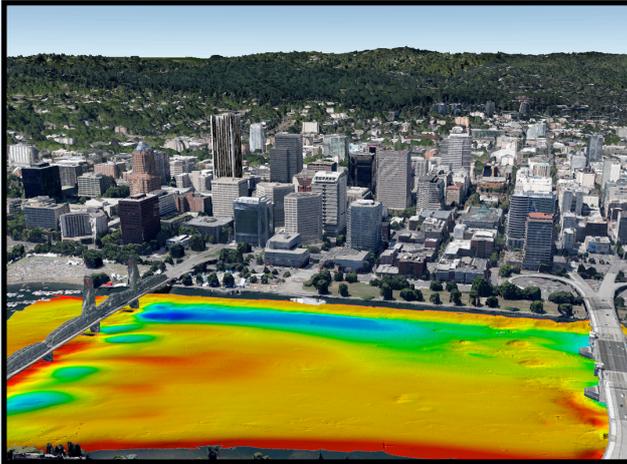
- ✓ Shallow Water Bathymetry
- ✓ Pipeline Surveys
- ✓ Pond, River and Estuary Surveys
- ✓ Harbor and Lake Surveys
- ✓ USV & UUV
- ✓ Open Ocean Surveys

## Options

- ✓ Senior Hydrographer For Support and Training
- ✓ Sound Velocity Profiler
- ✓ Laptop
- ✓ Turnkey Survey Solutions
- ✓ Permanent Hull Mount Option
- ✓ Pole Mount Option
- ✓ 200kHz Version
- ✓ Narrow Beam Along Track 0.9°
- ✓ Top-end INS (Roll, Pitch & Heading 0.01degree)
- ✓ Entry level INS
- ✓ Acquisition, Navigation and Post Processing Software
- ✓ Can be Delivered with all Major Software Packages e.g. HYPACK, QINSy, EIVA, CARIS and Others

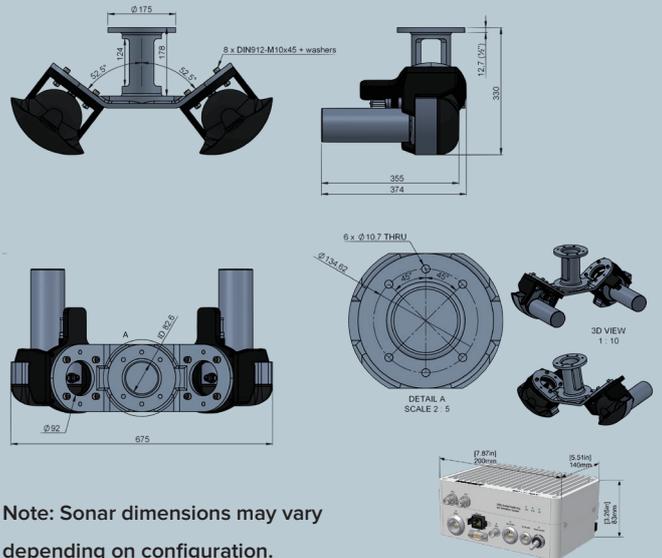
EXPERTS in sensor equipment providing telemetry and communication solutions for harsh environments.  
NORBIT develops and delivers innovative products - allowing you to explore more.

# Norbit - iWBMSH-Dual Head 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% (TRUEHEAVE™), 5 cm OR 5% (REAL TIME)
WEIGHT	APPROX. 15kg (AIR) LESS THAN 9.5kg (WATER) (EXCL. BRACKET)
INTERFACE	ETHERNET
CABLE LENGTH	STD. 8m, OPT: 2m, 25m AND 50m
POWER CONSUMPTION	100W (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: 100m



Note: Sonar dimensions may vary depending on configuration.