

NORBIT - Dual Head, iWBMSH STX Long Range TURNKEY MULTIBEAM SONAR SYSTEM

For High Resolution 3D&4D Bathymetric Survey

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 & Pitch 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*

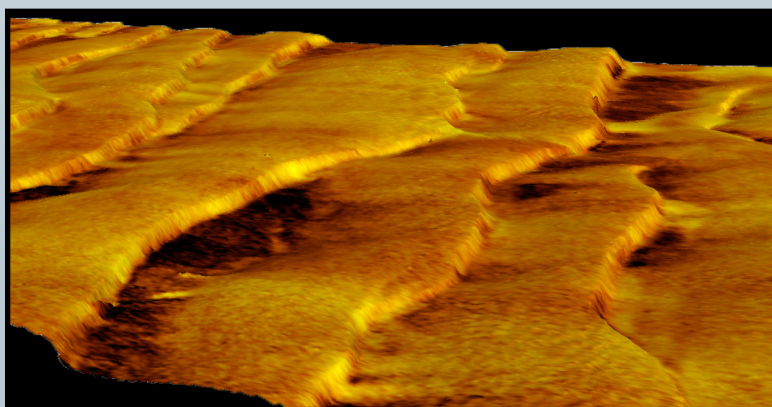
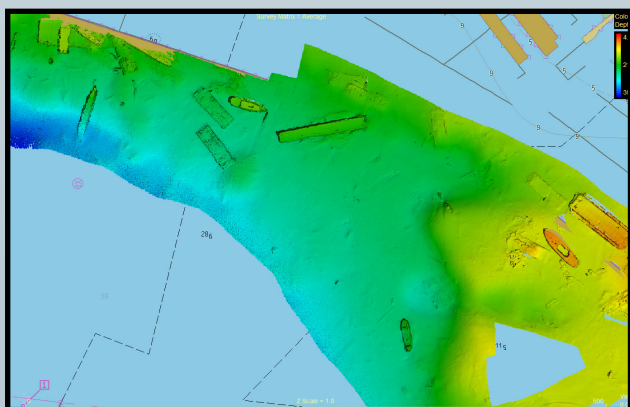
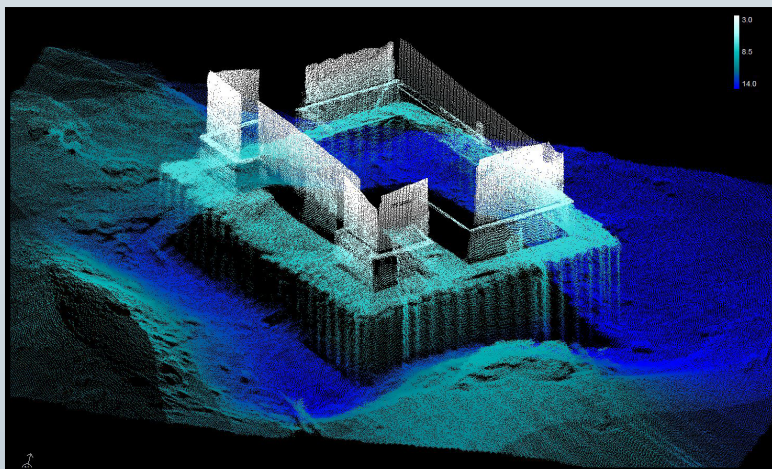
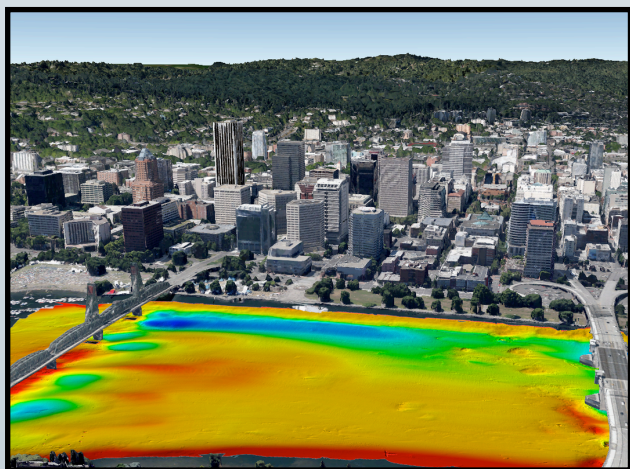
Applications

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

Options

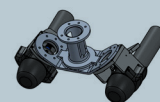
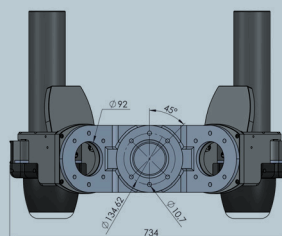
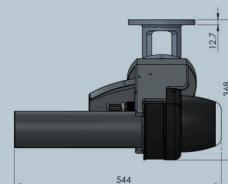
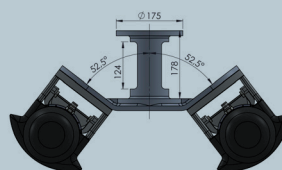
- ✓ Senior Hydrographer For Support and Training
- ✓ Sound Velocity Profiler
- ✓ Laptop
- ✓ Turnkey Survey Solutions
- ✓ Permanent Hull Mount Option
- ✓ Pole Mount Option
- ✓ Narrow Beam Along Track 0.9°
- ✓ Top-end INS (Roll, Pitch & Heading 0.01 Deg)
- ✓ Entry level INS
- ✓ Acquisition, Navigation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

NORBIT - Dual Head, iWBMSH STX Long Range For High Resolution 3D&4D Bathymetry



TECHNICAL SPECIFICATION

SWATH COVERAGE	5-280° FLEXIBLE SECTOR
RANGE RESOLUTION	<20mm (ACOUSTIC W. 80kHz BANDWIDTH)
NUMBER OF BEAMS	512-1024 EA & ED
OPERATING FREQUENCY	NOMINAL FREQUENCY 200kHz (FREQUENCY AGILITY 200-400kHz)
DEPTH RANGE	0.2m TO 600m (COLD WATER)
PING RATE	UP TO 60Hz, ADAPTIVE
RESOLUTION (ACROSS X ALONG)	1.8° x 1.8° @ 200kHz / 0.9° x 0.9° @ 400kHz
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	<16KG (AIR) & <9.5KG(WATER) (WEIGHT WITHOUT IMU AND 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.

