



NORBIT- iWBMS multibeam sonar system for high resolution bathymetry

Compact and high resolution curved array bathymetric mapping system by NORBIT

This tightly integrated broadband multibeam turnkey solution offers high resolution bathymetry over a wide swath. The high-end sonar with Applanix WaveMaster II (globally leading GNSS/INS system) embedded into the unit ensures fast and reliable mobilisation and highest quality sounding for surveys in all conditions.

New technology 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 and 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

Pole mount and travel option

Mounting bracket included

FM and CW processing

Narrow Beam Option

Flexible power

Exceeds IHO *Special Order*, CHS *Exclusive Order* and USACE *New Work*

Applications

Shallow water bathymetry

Pipeline surveys

Pond, river and estuary surveys

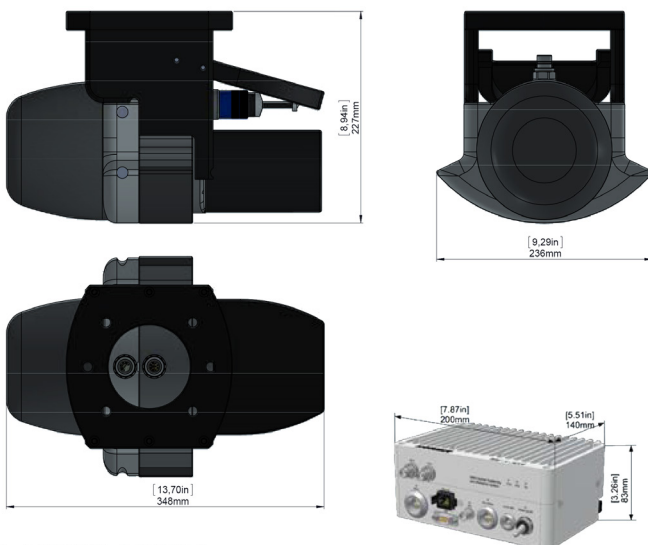
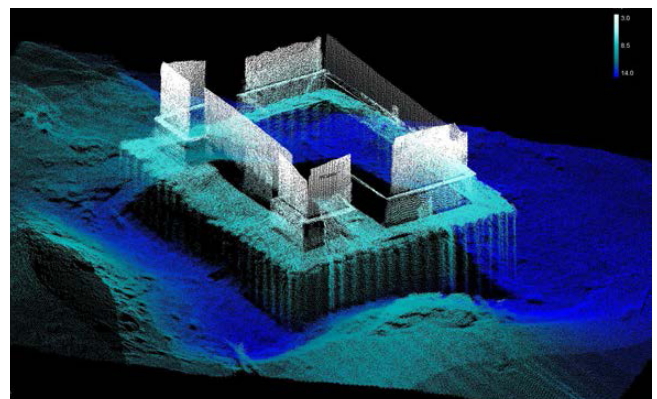
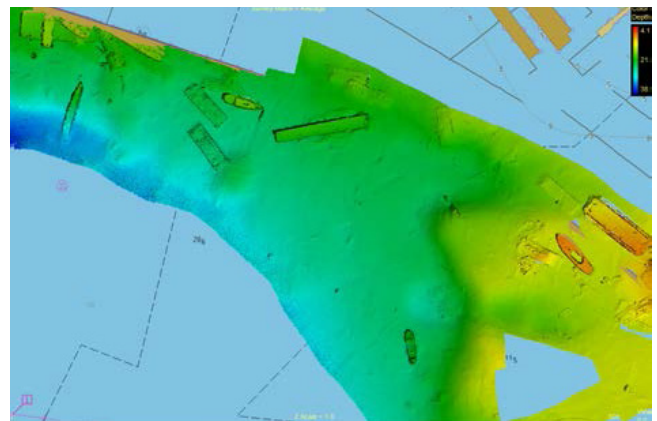
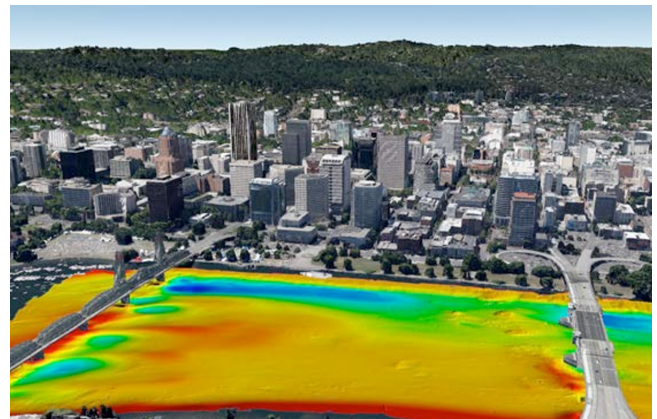
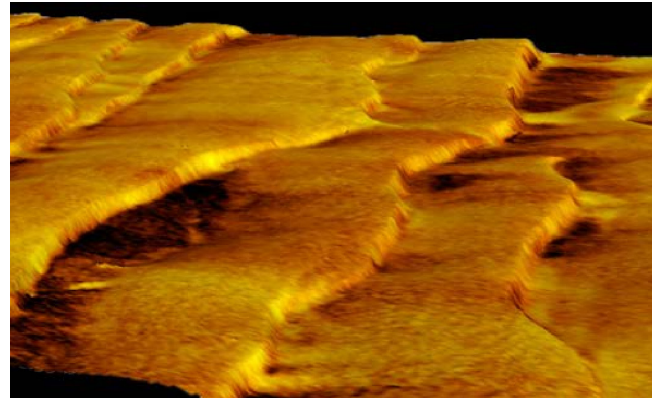
Harbour and lake surveys

Unmanned surface applications (AUV or ASV)

Coastal surveys

Technical specification

Swath coverage	5-210° flexible sector (shallow water IHO special order >155°)
Range resolution	<10mm acoustic w. 80kHz bandwidth
Number of beams	256-512 (1024 HDS) EA & ED
Operating frequency	Nominal frequency 400kHz (frequency agility 200-700kHz)
Depth range	0.2-275m (>300m with 0.9° x 0.9° option)
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	0.03° (RTK) with 2m antenna separation
Pitch/roll accuracy	0.02° independent of antenna separation
Heave accuracy	2cm OR 2% (TrueHeave™), 5cm or 5% (real time)
Weight	8.5kg (air) 3.5kg (water)
Interface	Ethernet
Cable length	STD 8m, OPT: 2m, 25m and 50m
Power consumption	60W (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 (sonar): 100m



Part #12004-AACDB4