

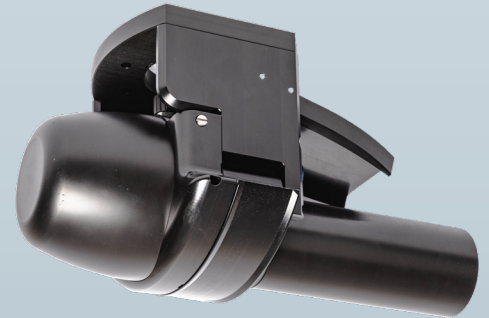
## NORBIT - iWBMS EKINOX TURNKEY MULTIBEAM SONAR SYSTEM

For High Resolution Bathymetry

Compact and high-resolution 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 SBG Ekinox GNSS/INS embedded into the unit ensures fast and reliable mobilisation and highest quality sounding for surveys in all conditions.

The WBMS-series are based on a flexible sonar platform that utilizes 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
- ✓ Mounting Bracket Included
- ✓ FM & CW Processing
- ✓ Flexible Power
- ✓ Exceeds IHO *Special Order*, CHS *Exclusive Order* & USACE *New Work*

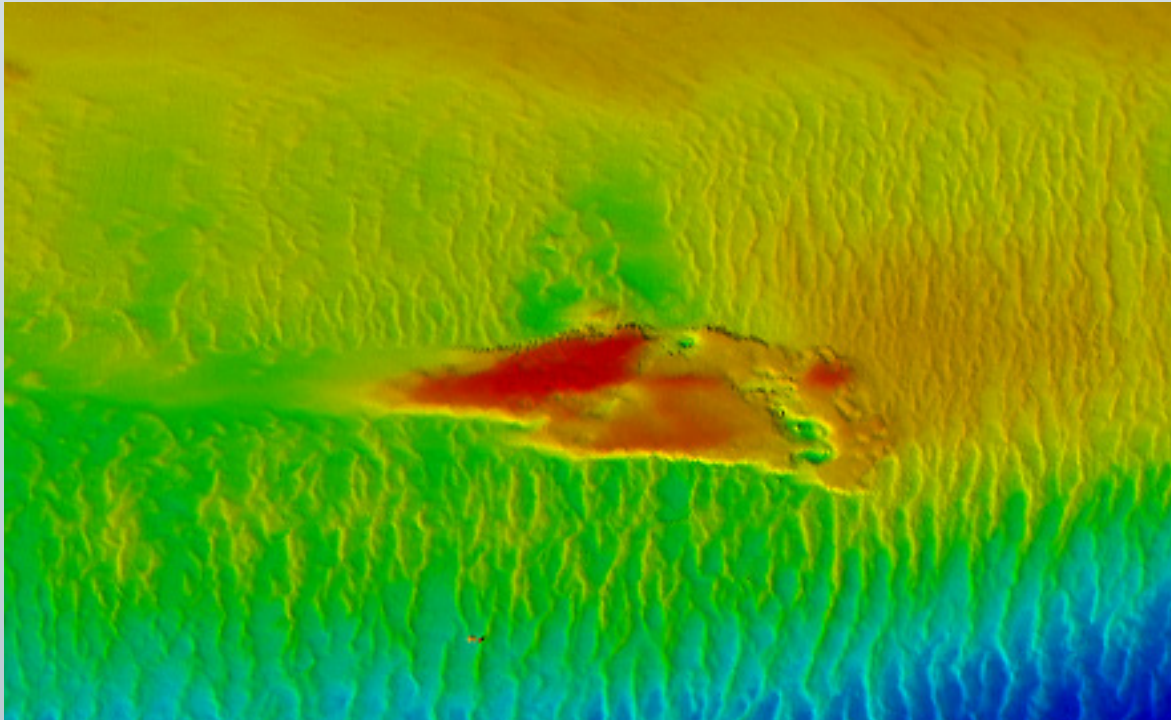
### Applications

- ✓ Shallow Water Bathymetry
- ✓ Pipeline Surveys
- ✓ Pond, River and Estuary Surveys
- ✓ Harbor and Lake Surveys
- ✓ Unmanned Surface Applications (AUV or ASV)
- ✓ Coastal Surveys

### Options

- ✓ Sound Velocity Profiler
- ✓ Turnkey Survey Solutions
- ✓ Permanent Hull Mount Option
- ✓ Pole Mount
- ✓ Backscattering Strength Output
- ✓ High-end INS
- ✓ Acquisition, Navigation and Post Processing Software
- ✓ Compact version (1.9° along track)
- ✓ Senior Hydrographer for Support and Training
- ✓ Can be Delivered with Software Packages e.g. Qinertia, HYPACK, Qinsy, EIVA, CARIS, BeamworX and Others

# NORBIT iWBMS EKINOX Wideband Multibeam Sonar For High Resolution Bathymetry



## TECHNICAL SPECIFICATION

|                                |  |
|--------------------------------|--|
| SWATH COVERAGE                 | 5-210° FLEXIBLE SECTOR<br>(SHALLOW WATER IHO SPECIAL ORDER >155°)  |
| RANGE RESOLUTION               | <10mm ACOUSTIC w. 80kHz BANDWIDTH  |
| NUMBER OF BEAMS                | 256-512 EA & ED  |
| OPERATING FREQUENCY            | NOMINAL FREQUENCY 400kHz<br>(FREQUENCY AGILITY 200-700kHz)   |
| DEPTH RANGE                    | 0.2-275m (>300m WITH 0.9° X 0.9° OPTION)   |
| PING RATE                      | UP TO 60Hz, ADAPTIVE   |
| RESOLUTION<br>(ACROSS X ALONG) | STD: 0.9° X 0.9° @400kHz<br>AND 0.5° X 0.5° @700kHz  |
| POSITION                       | HOR: ±(10mm +0.5ppm X DISTANCE FROM RTK STATION)<br>VER: ±(15mm +1ppm X DISTANCE FROM RTK STATION)<br>(ASSUMES 1m GNSS SEPARATION) |
| HEADING ACCURACY               | 0.03° (RTK) DUAL ANTENNA GNSS (BASELINE 2m)  |
| PITCH/ROLL ACCURACY            | 0.02° (RTK) INDEPENDENT OF ANTENNA SEPARATION  |
| HEAVE ACCURACY                 | 2cm OR 2.5% (DELAYED HEAVE), 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<br>OF IMMERSION UP TO 1m/WET-END (SONAR): 100m                             |

