

WIDEBAND MULTIBEAM 3D&4D SONAR

For High-Resolution 3D Imagery and 4D Experience

Introducing powerful, ultra compact and high-resolution multibeam sonar from NORBIT.

The WBMS series are the most compact sonars designed for use on all platforms. With low power consumption, the system is suitable to operate from any power source. NORBIT's wideband multibeam technology facilitates long range real-time data collection and at the same time achieves high resolution data in 3 dimensions. NORBIT uses rapid electronic scanning to combine proven 2D bathymetry into 3D georeferenced bathymetry and 4D experience.

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
- ✓ Multidetector
- ✓ FM & CW Processing
- ✓ Up to 80kHz Bandwidth
- ✓ Flexible Power Source (10-28 VDC, 100-240 VAC)
- ✓ Simple Ethernet Interface
- ✓ Integrated Sound Speed Probe

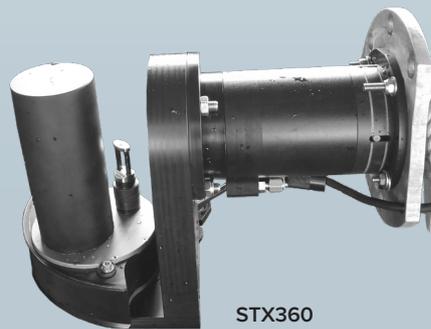
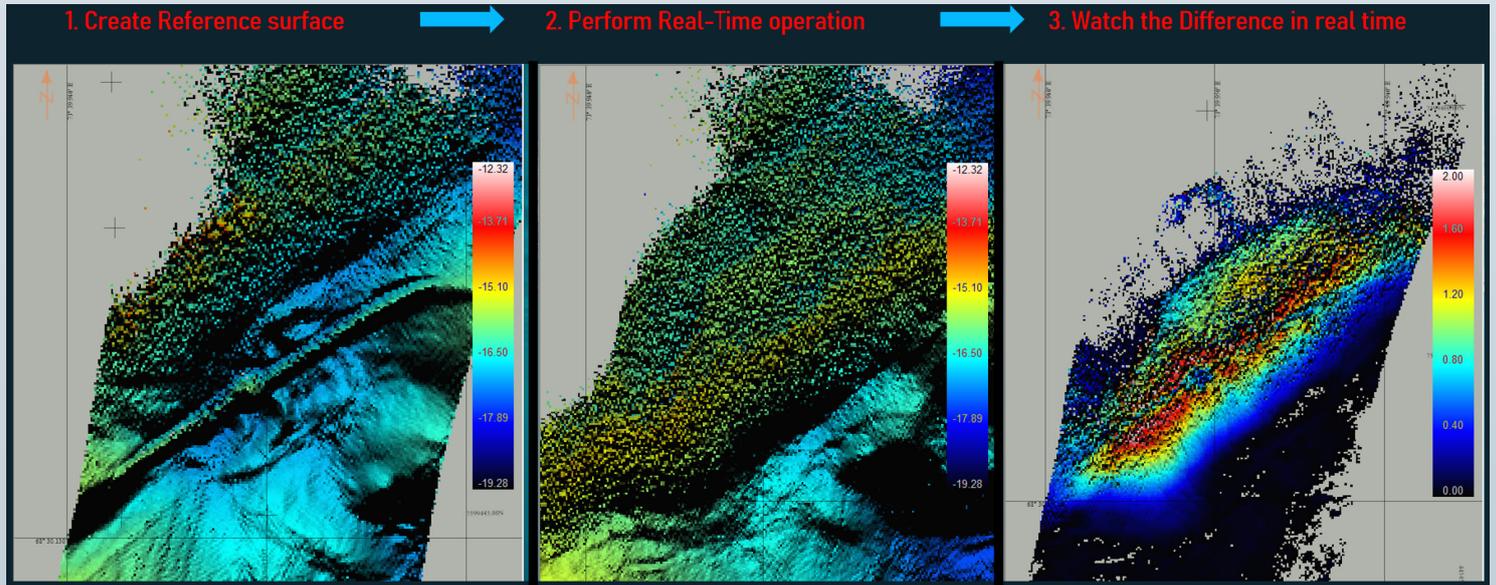
Applications

- ✓ Harbor and Coastline Surveys
- ✓ Dredging, Cable laying, Rock dumping
- ✓ USV, UUV, AUV & ROV Surveys
- ✓ Habitat Mapping and Bottom Classification
- ✓ Horizontal Detection Sonar
- ✓ 3D Bathymetry

Options

- ✓ Motion Sensor
- ✓ External or Integrated GNSS/INS system
- ✓ VDSL Data Link, for Long Range Telemetry
- ✓ Integrated Inertial Navigation Solution
- ✓ STX360-Full 360° coverage
- ✓ Backscattering Strength Output
- ✓ Can be Delivered with all Major Software Packages e.g. HYPACK, Qinsy, EIVA, CARIS and Others

NORBIT Wideband Multibeam Sonar For High Resolution 3D Imagery



TECHNICAL SPECIFICATIONS	
SWATH COVERAGE	5-210° FLEXIBLE SECTOR
RANGE RESOLUTION	<10mm (ACOUSTIC)
NUMBER OF BEAMS	256-512 EA & ED
OPERATING FREQUENCY	NOMINAL FREQUENCY 400kHz (FREQUENCY AGILITY 200-700kHz)
PING RATE	UP TO 60Hz, ADAPTIVE
DEPTH RANGE	0.2-275m (160m TYPICAL)
RESOLUTION	0.9° HOR, 0.9° VER @400kHz. 0.5° X 0.5° @700kHz
WEIGHT	5.4kg(AIR), 3.1kg(WATER)
POWER CONSUMPTION	APPROX. 50W
VOLTAGE	VOLTAGE 10-28VDC OR 100-240VAC (ROV DIRECT: 24-29VDC)
INTERFACE	100Mb/s ETHERNET
STANDARD CABLE LENGTH	STANDARD CABLE LENGTH 8m, OPT.: 2m, 25m, 50m, PIGTAIL, 600m WITH VDSL
DEPTH RATING	100m, OPTIONAL DEEP WATER 4500m and 6000m, DEEP WATER (>100m) DESIGNED FOR UP TO 7m/s VEHICLE SPEED
OPERATING TEMPERATURE	-4°C to +40°C (TOPSIDE -20°C to +55°C)
STORAGE TEMPERATURE	-20°C to +60°C

10.4in
265mm

9.3in
236.3mm

7.21in
183mm