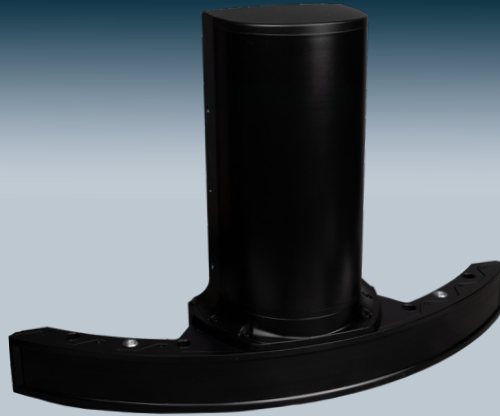




NORBIT WINGHEAD® i80S LR



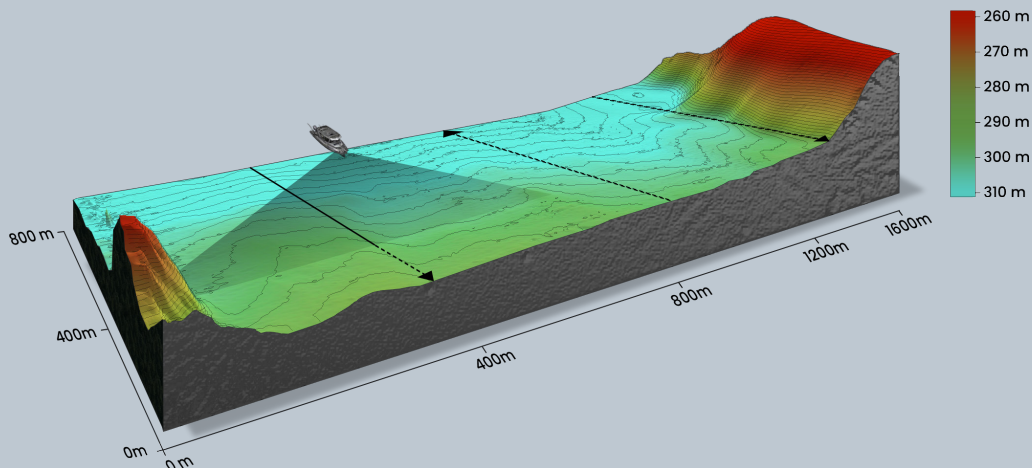
Superior Performance High-Resolution Integrated 3D&4D Long Range Motion Stabilised Bathymetric System

Designed to perform in extreme operational environments with high vessel motion, this cylindrical high resolution curved array bathymetric system, allows for rapid anywhere anytime mobilisation.

NORBIT WINGHEAD “S” series sonars are based on a state of the art analogue and digital platform featuring powerful signal processing capabilities, offering full motion stabilisation (roll, pitch and yaw) bathymetry plus several imagery and backscatter outputs as standard ensuring the highest quality survey data performance. 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.

The NORBIT WINGHEAD i80S Long Range is a compact high resolution curved array broadband multibeam sonar designed for use in the most demanding operational environments. Characterised further by a small form factor, low power draw and tight integration, WINGHEAD i80S Long Range is suitable for survey platforms ranging from small USVs to large vessel permanent hull mounts.

Supported by DCT (NORBIT Integrated Data Acquisition Software) for efficient survey data acquisition.



Data shown is from 300m depth in Trondheim Fjord



WINGHEAD i80S Long Range

NORBIT
- explore more -

Features	Options	Applications
<ul style="list-style-type: none"> ✓ Active Roll & Pitch Stabilisation ✓ 80kHz Bandwidth ✓ Backscatter Outputs (Intensity, Sidescan, Snippets, Water Column) ✓ Multidetect ✓ Pipeline Mode ✓ Simple Ethernet Interface ✓ Integrated Sound Velocity Probe ✓ 1024 Dynamically Focused Beams ✓ Mounting Bracket Included ✓ FM & CW Processing ✓ Exceeds IHO Exclusive Order & USACE New Work 	<ul style="list-style-type: none"> ✓ Yaw Stabilisation w. Single Head ✓ Dual Swath w. Single Head ✓ 2048 Dynamically Focused Beams ✓ STX 4D Scanning ✓ Backscattering Strength Output ✓ Sound Velocity Profiler ✓ Dual Head Configuration ✓ Permanent Hull Mount Option ✓ Pole Mount ✓ Supports NORBIT iLiDAR ✓ Can be Delivered with Software Packages e.g. NORBIT DCT, HYPACK, Qinsy, EIVA, CARIS, beamworX and Others 	<ul style="list-style-type: none"> ✓ SV & USV Platforms ✓ Offshore Inspection, Repair and Maintenance (Irm) Operations ✓ Harbour; Quay Wall, Bridge and Structure Engineering Inspection Surveys ✓ Wreck and Seabed Search and Investigation ✓ Pond, River, Lake and Estuary Surveys ✓ Coastal Surveys ✓ Renewable Energy ✓ Mineral and Geological 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	EA & ED: 256, 512, 1024 (2048 OPTION)
STABILISATION	ROLL, PITCH (YAW OPTION)
OPERATING FREQUENCY	NOMINAL FREQUENCY 200kHz and 400kHz (FREQUENCY AGILITY 200-700kHz)
DEPTH RANGE	0.2m to 600m
PING RATE	UP TO 60Hz, ADAPTIVE
RESOLUTION (ACROSS X ALONG)	STANDARD: 0.5° X 0.9° @400kHz, 1° x 1.8° @200kHz
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° WITH 2m ANTENNA SEPARATION 0.01° WITH 4m ANTENNA SEPERATION
PITCH/ROLL ACCURACY	0.008° RTK & PPK, 0.01°
HEAVE ACCURACY	2cm OR 2% (TRUEHEAVE™), 5cm OR 5% (REAL TIME)
INTERFACE	ETHERNET
POWER CONSUMPTION	TYPICAL 95W (10-28VDC, 110-240VAC) TOTAL SYSTEM POWER CONSUMPTION
WEIGHT	8.0kg (AIR) 4.2kg (WATER) EXCL. BRACKET 8.5kg (AIR) 4.7kg (WATER) INCL. BRACKET
CABLE LENGTH	STD 8m, OPTIONAL: 2m, 25m
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

OUTLINE DRAWING

