PS-210030-9

NORBIT
WINGHEAD® B44
Deep Sea and Full Ocean models



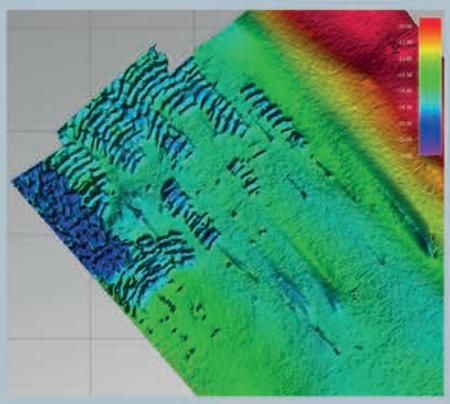
Ultra High-Resolution Curved Array Bathymetric System - Deep Sea or Full Ocean Rated.

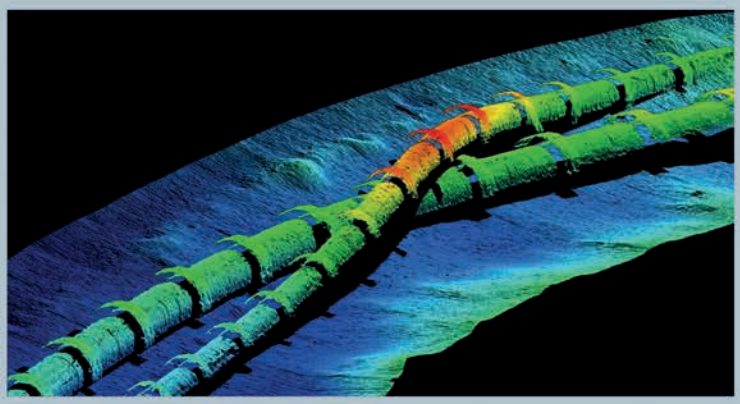
The WINGHEAD series are among the most compact multibeam sonars available, designed for deployment across a wide range of platforms including subsea ROVs, AUVs, and deep-tow systems. With low power consumption, the system is well suited for battery-operated applications.

NORBIT's wideband multibeam technology enables long-range, real-time data acquisition while maintaining exceptional resolution. The WINGHEAD sonars are built on a state-of-the-art analogue and digital platform with advanced signal processing capabilities, delivering roll-stabilised bathymetry alongside multiple imagery and backscatter outputs. Leveraging extensive R&D expertise, NORBIT has developed innovative technology from the ground up, enabling both existing and emerging applications to benefit from a compact, wideband curved-array multibeam sonar.

Depth Rating Options:
The WINGHEAD B44 is available in two pressure-rated versions to support a wide range of operational requirements:

Deep Sea Version: Rated to 4500 m
Full Ocean Version: Rated to 6000 m





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WINGHEAD B44 - Deep Sea & Full Ocean

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- explore more -

Features

- ✓ 80kHz Bandwidth
- ✓ Roll-stabilisation
- ✓ Backscatter outputs (Intensity, Sidescan, Snippets, Water Column)
- ✓ Multidetect
- ✓ Simple Ethernet Interface
- ✓ Integrated Sound Velocity Probe
- ✓ 1024 Dynamically Focused Beams
- ✓ FM & CW Processing
- ✓ Incl. Bench Test SIU
- ✓ Flexible Power
- ✓ Exceeds IHO Exclusive Order & USACE New Work

Options

- ✓ Sound Velocity Profiler
- ✓ Turnkey Survey Solutions
- ✓ Acquisition, Navigation and Post Processing Software
- ✓ Mounting Bracket
- ✓ Senior Hydrographer for Support and Training
- ✓ Can be Delivered with Software Packages e.g. HYPACK, Qinsy, EIVA, CARIS, BeamworX and Others

Applications

- ✓ USV, UUV, AUV & ROV
- ✓ Shallow Water Bathymetry
- ✓ Pipeline & Cable Inspection Surveys
- ✓ Quay wall, bridge and structure inspection surveys
- ✓ Pond, River and Estuary Surveys
- ✓ Harbor and Lake Surveys
- ✓ Coastal Surveys

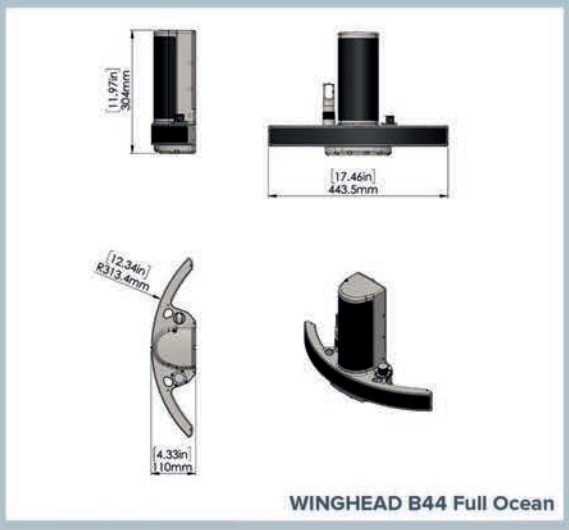
TECHNICAL SPECIFICATION

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 EA & ED
OPERATING FREQUENCY	NOMINAL FREQUENCY 400kHz (FREQUENCY AGILITY 200-700kHz)
DEPTH RANGE	0.2m to >400m
PING RATE	UP TO 60Hz, ADAPTIVE
RESOLUTION (ACROSS X ALONG)	STANDARD: 0.5° X 0.9° @400kHz, 0.3° x 0.5°@700kHz
INTERFACE	ETHERNET 100/1000BASE-T
VOLTAGE INPUT	SONAR HEAD: 24-48VDC SIU: 12-28VDC (24V RECOMMENDED) OR NORBIT PSU 100/220VAC
POWER CONSUMPTION	75W (10-48VDC, 110-240VAC)
MAX SURVEY SPEED	7.2 knots
DEPTH RATING	WINGHEAD B44 DEEP SEA: 4500m WINGHEAD B44 FULL OCEAN: 6000m
DIMENSIONS	DIMENSIONS WITHOUT BRACKET WINGHEAD B44 DEEP SEA: W: 447.0mm/17.59", H: 304mm/11.97", L: 108.0mm/4.25" WINGHEAD B44 FULL OCEAN: W: 443.5mm/17.46", 304mm/11.97", L: 110mm/4.33"
WEIGHT	WINGHEAD B44 DEEP SEA: 12.4 kg (AIR) 8.5kg (WATER) INCL. BRACKET WINGHEAD B44 FULL OCEAN: 13.1 kg (AIR) 9.4kg (WATER) INCL. BRACKET
CABLE LENGTH	STD: 2m pigtail for ROV/AUV, OPT: 8m, 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

OUTLINE DRAWINGS



WINGHEAD B44 Deep Sea



WINGHEAD B44 Full Ocean