

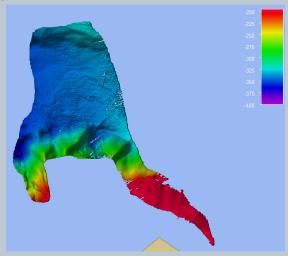


# Superior Performance Ultra High-Resolution 3D&4D Long Range Motion Stabilised Bathymetric System.

Designed to offer unsurpassed performance in shallow and medium water depths. This cylindrical ultra-high resolution curved array bathymetric system allows for rapid mobilisation anywhere anytime.

The NORBIT WINGHEAD platform is based on a state of the art analogue and digital technology featuring powerful signal processing capabilities ensuring the highest quality survey data performance. The sonar offers active roll and pitch stabilized bathymetry plus several imagery and backscatter as standard outputs. 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 Long Range WINGHEAD B57S sonar is a ultra-high resolution curved array broadband multibeam echo sounder designed to operate in the most demanding environments. Characterised by compact form factor, low power draw and tight integration, WINGHEAD B57S is an optimal choice for surface vessels ranging from mid size USVs to large vessels and permanent hull mounts.





# WINGHEAD B57S



### Standard Features

- √ Active Pitch and Roll Stabilisation
- √ Backscatter Outputs (Intensity, Sidescan, Snippets, Water Column)
- ✓ Multidetect
- √ Pipeline Mode
- √ Simple Ethernet Interface
- √ Integrated Sound Velocity Probe
- √ 1024 Dynamically Focused Beams
- √ FM & CW Processing
- √ Mounting Bracket Included
- ✓ Exceeds IHO Exclusive Order & USACE New Work

## **Optional Features**

- ✓ Dual Head Configuration
- Pole and Permanent Hull Mount
- ✓ Yaw Stabilisation w. Single Head
- ✓ Dual Swath w. Single Head
- ✓ 2048 Dynamically Focused Beams
- √ 19Inch Rack Mount, Top Side
- √ Layered Media Detection (LMD)
- Multibeam Sonar can be Integrated with Inertial Navigation System & Integrated NTRIP Client
- ✓ Can be Delivered with Acquisition, Navigation and Post Processing Software Packages e.g. HYPACK, Qinsy, EIVA, CARIS, BeamworX and Others

### **Applications**

- √ USV Survey Platforms
- ✓ Mid Water Bathymetry
- ✓ Pipeline & Cable Pre Route Surveys
- ✓ Post installation pipeline & cable inspections
- Mineral and Geological Surveys
- ✓ Wreck and Seabed Search and Investigation
- ✓ Oceanographic Research
- √ EEZ Surveys
- √ Coastal Surveys

#### TECHNICAL SPECIFICATION

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SWATH COVERAGE	5-210° FLEXIBLE SECTOR
RANGE RESOLUTION	<20mm ACOUSTIC w. 40kHz BANDWIDTH
NUMBER OF BEAMS	256, 512, 1024 EA & ED
OPERATING FREQUENCY	NOMINAL FREQUENCY 100kHz (FREQUENCY AGILITY 80kHz-240kHz)
DEPTH RANGE	0.2m to 1200m a) EXTINCTION RANGE >1,250m b) SWATH COVERAGE ~1,000m @ 200m WD c) SWATH COVERAGE ~600m @ 100m WD
PING RATE	UP TO 60Hz, ADAPTIVE
RESOLUTION (ACROSS X ALONG)	STANDARD: 2° X 2° @100kHz 1° X 1° @200kHz
INTERFACE	ETHERNET & SERIAL
POWER CONSUMPTION	TYPICAL <95W (10-28VDC, 110-240VAC) TOTAL SYSTEM POWER CONSUMPTION
DIMENSIONS	DIMENSIONS: H: 446mm/17.58", L: 551.2mm/21.70", W: 127mm/5.01" DIMENSIONS WITH BRACKET H: 446mm/17.58", L: 555mm/21.85", W: 141.3mm/5.56"
WEIGHT	15.3kg (AIR) 8kg (WATER) - WITHOUT BRACKET 18.5kg (AIR) 10.4kg (WATER) - WITH BRACKET
CABLE LENGTH	STD 8m, OPTIONAL: 25m and 40m (LONGER CABLES UPON REQUEST)
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**

