



DIVER HANDHELD NAVIGATION SYSTEMS

The Artemis range of Diver Navigation Systems offer covert navigation, sonar imaging and acoustic communication capabilities for operations in the most hostile environments.



UNPARALLELED DIVER NAVIGATION SYSTEMS FOR SEARCH
AND RESCUE, MILITARY AND SPECIAL FORCES DIVERS

artemis

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SYSTEM FEATURES

- + High accuracy covert navigation capability
- + Realtime sonar imaging for low visibility target detection and identification
- + Intuitive operation for effective use in high pressure situations
- + Text messaging functionality for reliable diver communication
- + Accurate diver tracking for improved safety
- + Easy mission planning and post-dive log data review
- + Compact console with a fully integrated sensor package

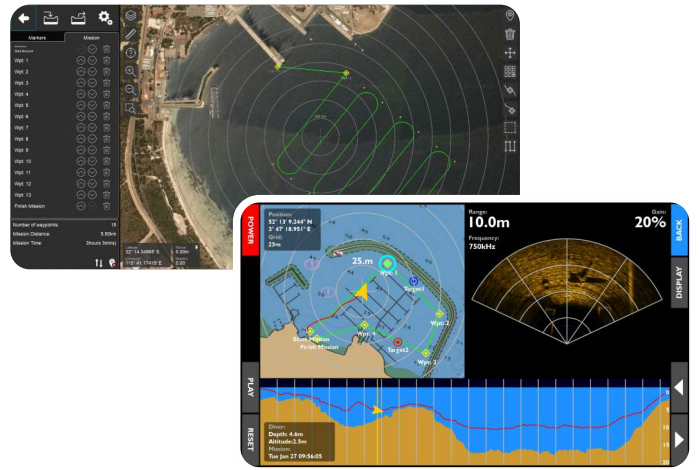
CONFIGURATION OVERVIEW

Available in three different configurations to suit all mission requirements.

	ArtemisPRO	ArtemisHHS	ArtemisLITE
Mission Planning and Post-Dive Review	✓	✓	✓
Attitude Heading Reference System (AHRS)	✓	✓	✓
Artemis HMD Compatible (Ordered Separately)	✓	✓	✓
Thermal Imaging Camera Compatible (Ordered Separately)	✓	✓	✓
Internal GNSS Receiver	✓	✓	✓
GNSS Receiver Buoy	✓	✓	✓
Internal Depth Sensor	✓	✓	✓
Acoustic Messaging Beacon	✓	✓	✓
Acoustic Tracking Beacon	✓	✓	✓
Video Camera	✓	✓	✗
Dive Light	✓	✓	✗
Oculus Multibeam Imaging Sonar	✓	✓	✗
Integrated Pinger/Transponder Locator	✓	✓	✗
Doppler Velocity Log (DVL)	✓	✗	✗

INTUITIVE MISSION PLANNING AND DATA REVIEW

Plan precise dive missions using the intuitive map viewer and waypoint editor within the NavPoint software. Post-dive, provide a detailed debrief using synchronised navigation, sonar, video, and depth data for review and analysis.

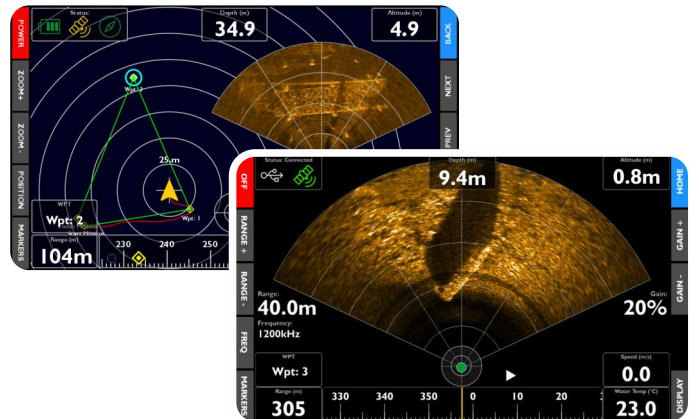


ACCURATE, RELIABLE NAVIGATION

Navigate with confidence using the interactive displays. Remain informed of current diver location, heading and swim distance overlaid on a range of charts. The Artemis systems provide covert dead reckoning navigation using a DVL and AHRS, or a discreet external floating GNSS receiver buoy for actual location.

REAL-TIME SONAR IMAGING

Remain operational even in the most challenging low visibility conditions with the dual frequency Oculus multibeam imaging sonar. Benefit from real-time, high-definition imaging for improved situational awareness, navigation, and target identification.



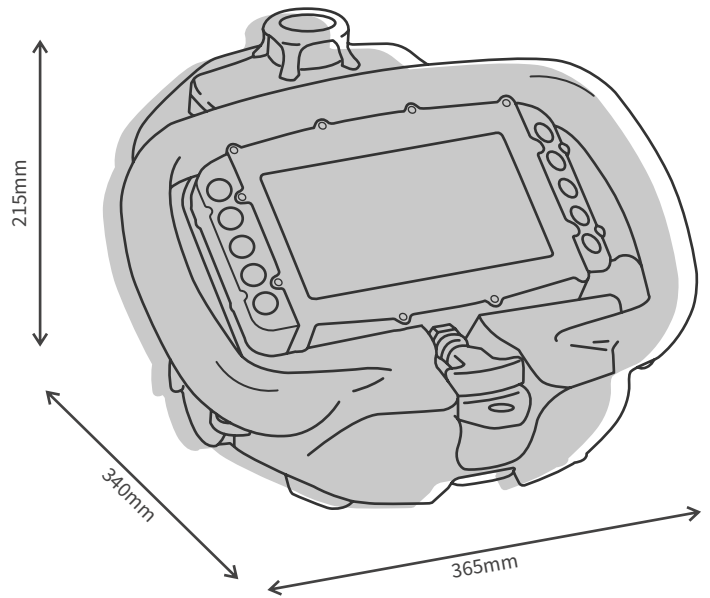
RELIABLE COMMUNICATION AND DIVER TRACKING

Maintain communication with the surface, and other divers, using the integrated SeaTrac acoustic beacon. Allow the surface to accurately track the system in situations when diver safety is paramount.



OPTIONAL ANCILLARIES

- + Topside Control System – ruggedised tablet equipped with NavPoint dive mission planning and review software
- + SeaTrac Base System – topside acoustic beacon and ancillary equipment for diver tracking and messaging
- + Artemis Head Mounted Display (HMD) System
- + Artemis Thermal Imaging Camera and Telescopic Mast



SPECIFICATION

MECHANICAL

Dimensions	365mm (L) x 340mm (W) x 215mm (H)
Weight	~10.5kg (max) in air, ~0.25kg max in water
Operating Temp'	-10°C to +45°C
Operating Depth	100m sea water

ELECTRICAL

Screen	7" 1024 x 600 pixels, adjustable back-light
Data Logging	512Gb Internal Solid State Drive*
Sensors	Pressure, Temperature, Attitude/Heading
User Interface	10 x piezo buttons
Connector	USB2.0 480Mbps

GNSS NAVIGATION

GNSS Receiver	72-channel GPS L1 C/A, GLONASS L10F, BeiDou B1I Galileo E1B/C. 2.0m CEP Position Accuracy*
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BATTERY PACK

Battery Chemistry	NiMh	Li-Ion
Operating Time	6-8 hours typical use	16-20 hours typical use
Charging Time	Approx 4 hours from fully discharged state	
Charger Supply	90-264V AC Mains at 50-60Hz	

DA-150-P03253-02

SONAR

Oculus Model	M750d	M1200d	M3000d
Frequency	750kHz/1.2MHz	1.2MHz/2.1MHz	1.2MHz/3.0MHz
Range Max	120m/40m	40m/10m	30m/5m
Range Min	0.1m	0.1m	0.1m
Horizontal Beam	130°/130°	130°/60°	130°/40°
Vertical Beam	20°/20°	20°/12°	20°/20°

DOPPLER VELOCITY LOG (DVL)

Frequency	500kHz	1MHz
Range	200m bottom tracking	75m bottom tracking
Beam Geometry	4 Beams, 2.4° conical, Janus configuration	
Velocity Resolution	1mm/second	

DIVER TRACKING AND COMMUNICATION

Acoustic Range	1km radius horizontal, 1km vertical (hemispherical)
USBL	Tracks diver from surface**
Communications	24-32kHz, 100 baud.
Targets	15 unique beacon identifiers, broadcast to all capability. Allows up to 14 targets to be tracked from a single X150 USBL beacon.

*Other options available

**SeaTrac USBL Topside Acoustic Beacon to be ordered separately

Please note that all specifications may be subject to change in line with our policy of continual improvement



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