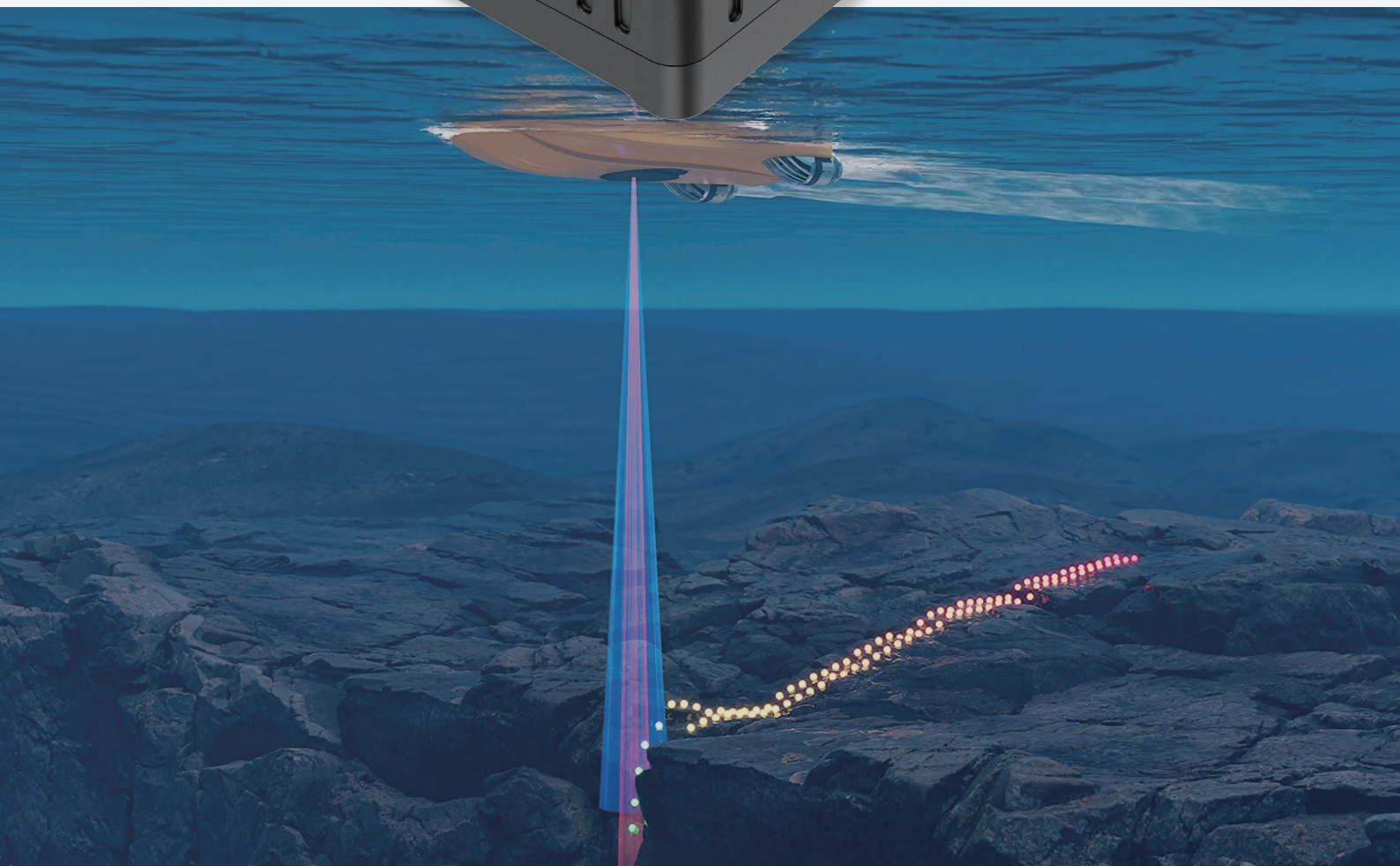


D60

DUAL-FREQUENCY ECHO SOUNDER



► Highlights

The D60 is an integrated dual-frequency echo sounder designed for easy installation on unmanned surface vessels (USVs). Operating at 200 kHz and 33 kHz, it provides accurate depth measurements with strong signal penetration. Built-in attitude and temperature sensors support real-time compensation for improved measurement reliability. Adaptive algorithms automatically adjust system parameters, eliminating the need for manual tuning. The D60 maintains consistent performance in challenging environments such as turbid waters and areas with rapid depth changes, supporting reliable bathymetric surveys.



► Key feature



Ultra-Compact Design



Integrated IMU



Intelligent Auto-Tuning

► Ultra-Compact Integrated Design



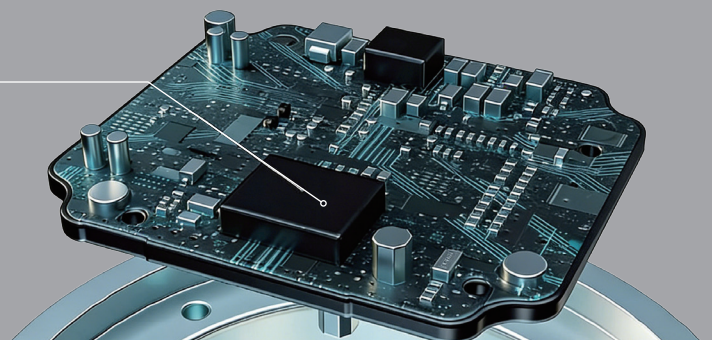
Optimized for USV deployment

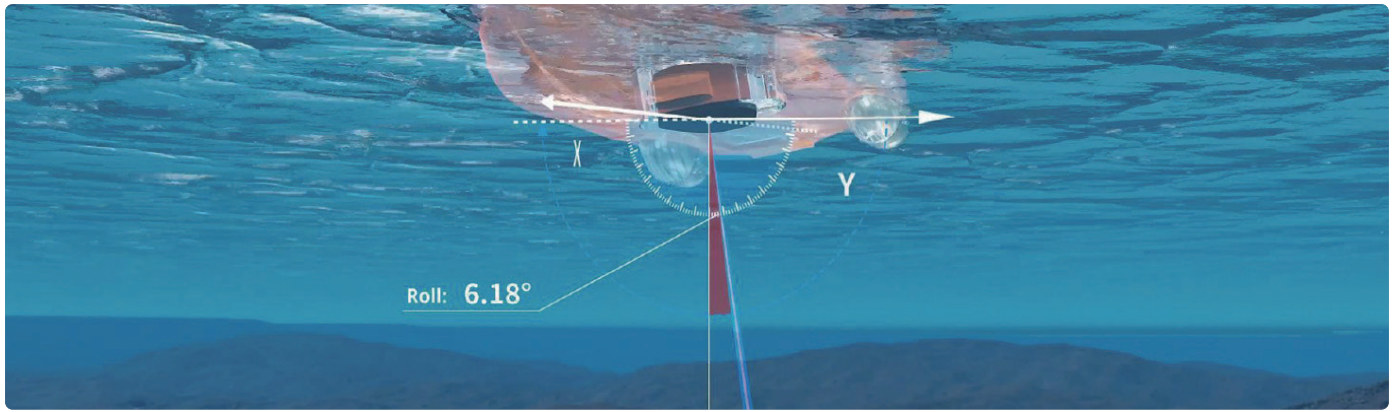
Quick installation and removal

► Integrated IMU for Motion Compensation

Attitude Sensor

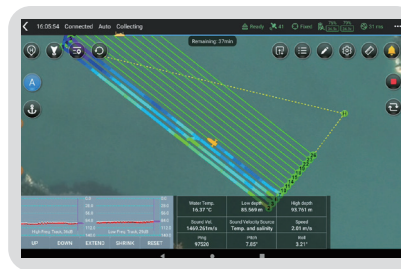
Advanced motion compensation
100 Hz sampling rate
Optimal accuracy with every measurement





➤ Intelligent Auto-Tuning

Smart algorithms evaluate depth data in real time and automatically adjust system parameters within 0.2 seconds. Gain and range settings are optimized based on live echo signals, ensuring consistent data quality without manual intervention.



➤ Efficient and Streamlined Operation

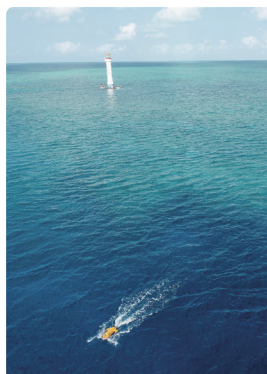


EasySail software supports data acquisition, real-time display, post-processing, and result export within a single workflow. A single operator can manage the full survey process using one vessel and one remote controller.

➤ Application



Channel dredging



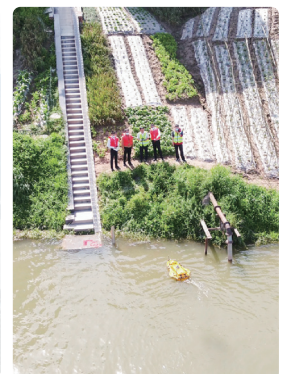
Estuary surveying



Rapid depth change reservoir surveying



Canyon waterway surveying



Flood emergency surveying

SPECIFICATIONS

► Sonar

Operating Frequency	200 kHz / 33 kHz
Depth Range	0.2-250 m @200 kHz 0.8-1000 m @33 kHz
Depth Accuracy	±1 cm + 0.1% h, Resolution: 1 cm@200 kHz; ±10 cm + 0.1% h, Resolution: 4 cm@33 kHz
Beam Width	6°± 2° @200 kHz 18° ± 3°@33 kHz
Maximum Ping Rate	50 Hz
Water Temperature Sensor	-55°C to +125°C, Real-Time Sound Velocity Correction
Sound Velocity Adjustment	1370-1700 m/s, Resolution: 0.1 m/s
Sound Velocity Surface	Optional
Integrated Attitude Sensor	Roll ±0.1°, Pitch ±0.1°, Latency 20 ms
Internal Storage	8 GB

► Communication

Data Output Format	CHC Format
Interface	AUX Port, Transducer Port, APACHE Port (PPS, LAN*1, Power*1)

► Electrical

Power Supply	DC 12-38 V , Recommended 24V
Average Power Consumption	15 W

► Physical

Weight	Main Unit: 1.2 kg Transducer: 4 kg
Dimensions	Main Unit: 162 × 121 × 64 mm Transducer: 228 × 156 × 75 mm
IP Rating	IP67
Material	Aluminum Alloy
Operating/Storage Temperature	Operating: -20°C to 60°C Storage: -40°C to 70°C

*Specifications are subject to change without notice.

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