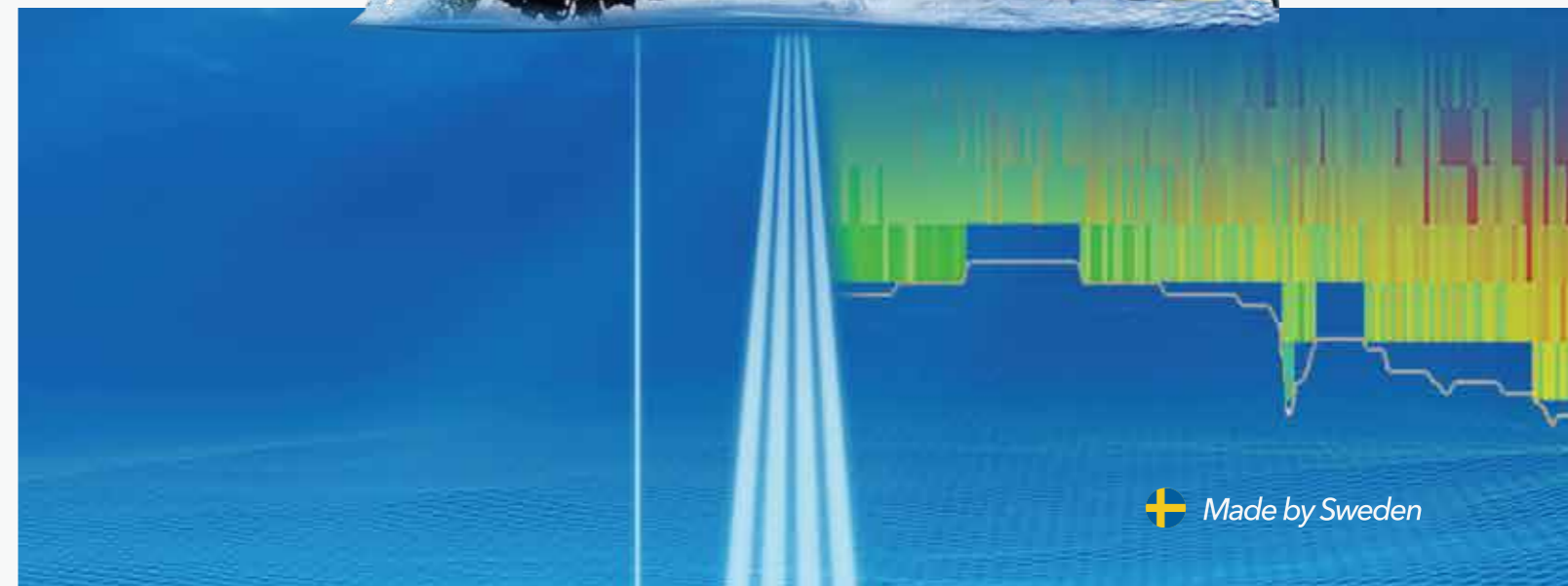
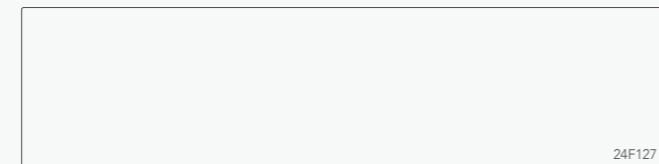


Specification

Vehicle Specifications	Dimension	1185 mm*593 mm*397 mm	
	Work Weight	30 ~ 45 kg	
	Material	Carbon Fiber, Rubber Bumper	
	Waterproof	IP67	
	Anti-wave & Wind	3rd Wind Level & 2nd Wave Level	
	Anticollision Sensor	10-30 Meters Detection Distance	
	Camera	360° Omnidirectional Video	
Power and Electrical Parameters	Propeller Type	Quick Release Culvert Propellers	
	Power	1000W Brushless DC	
	Speed	0.1~6 m/s	
	Battery Capacity	29.04 V/34.3 Ah (Typical)/29.04 V/33.27 Ah(Rated)	
	Battery Endurance	40 km@1.5 m/s	
	Battery Safety	Power Display, High-temperature/Over-current/Short-circuit Protection	
Communication Control	Type	2.4 GHz Wireless Technology (1.7 km); 4G Network	
	GNSS Differential Types	Radio; Network; Controller Differential	
	Navigation Mode	Manual, Auto-Pilot, Auto-Return	
	Data Storage Methods	Simultaneous Support for Ship-side Storage and Controller Broadcast	
GNSS	Channels	1408	
	Position Accuracy	RTK	H: ±8 mm+1 ppm ; V: ±15 mm+1 ppm;
		DGNSS	H: ±0.4 m+1 ppm; V: ±0.8 m+1 ppm;
		Single	H: 1.5 m ; V: 2.5 m;
	Directional Accuracy	≤0.2°	
Timing Accuracy	≤20 ns		
Single Beam Echo Sounder	Frequency	200 KHz	
	Beam Angle	≤5°±0.5°	
	Accuracy	±0.01 m + 0.1% x D (D is the Depth of Water)	
	Depth Range	0.15m ~ 200 m	
	Data Formats	Standard NMEA, DESO 25, ODOM, Knudsen, Bathy, Echotrac	
IMU	Refresh Rate	200 Hz	
	Position Accuracy	< 1 m/30 s	
	Directional Accuracy	≤2.1°/h	

HydroBoat 1200

Multi-Purpose USV Platform for Hydrographic Surveys and Monitoring



HydroBoat 1200

HydroBoat 1200—an embodiment of compactness and ease, tailored for seamless operation across a spectrum of equipment.

Enhanced by professional CFD technology, its stability finds new heights. Melded with high-precision single-beam echo sounder, GNSS directional positioning receiver, and an advanced intelligent boat-control system, it deftly serves varied water operational demands.

Augmented safety through embedded IMU, 360° pan-tilt camera, and millimeter-wave radar fortifies its attributes comprehensively. This autonomous vessel, which can be mounted with leading ADCP, side-scan sonar, dual-frequency sounder, multi-parameter water quality meter, image sonar, and more, stands poised as the quintessential partner for tasks encompassing current measurement, bathymetry, underwater survey, and water quality assessment.

Features

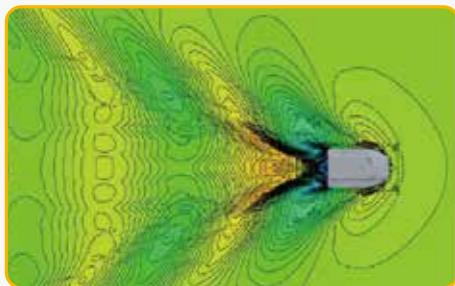


Adaptive Water Flow

Precise hovering and efficient trajectory tracking. No fear of waves and wind. Follow predefined path with accuracy even in challenging environment.

New INS Combination Algorithm

Measure changes in velocity and orientation, and able to solve the accurate position information in GNSS-blocked areas to complete the planned work.



Stability by Design

Hydrodynamically efficient design for the USV's intended operations, guided by CFD simulation, enhances hull stability and noise reduction under varied water conditions and loads.

Portability

1. 10 kg lightweight hull
2. 1229 mm small size hull
3. Multi-function Android boat control software



Versatility

1. 240 mm large moon pool
2. Supporting transparent data transmission
3. Reaching maximum boat speed of 6 m/s for efficient movement



Safety

1. 360° PTZ camera
2. Millimetre wave obstacle avoidance radar
3. Smart battery management platform



Applications

