

DVL-HOVER-H1000

Underwater Anti-Current Hover Navigation Sensor

Light Weight & Low Power Consumption

Compatible with Small-Size ROV / AUV

Improve the engineering operation capability of compact ROV / AUV

Water tracking: Not available



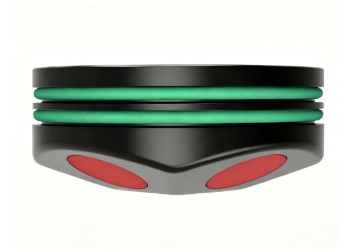
Overview

The DVL-HOVER-H1000 is a compact Doppler velocity log designed for subsea platform operators requiring reliable bottom-track velocity, altitude measurement and anti-current station-keeping capability.

Integrating advanced broadband signal processing, high-precision acoustic transducer design and low-power mixed-signal circuitry, this embedded DVL delivers stable measurement performance in demanding subsea environments. Its 90 mm compact diameter enables flexible integration into space-constrained underwater vehicles.



DVL-HOVER-H1000



**DVL-HOVER-H1000-E
(Embedded)**

Core Highlights

- **$\pm 0.4\%$ ± 5 mm/s**
Long-term bottom tracking velocity precision
- **5 cm Minimum Blind Zone**
<5cm acoustic blind zone, allowing ROVs to approach the seabed closely
- **Wide Platform Compatibility**
Works with multiple ROV models. Delivers reliable station keeping & attitude stability under rough subsea conditions
- **Ultra-Compact Mini Form Factor**
Lightweight & handheld footprint, enhancing vehicle operational performance

Technical Specifications

Model	DVL-HOVER-H1000	DVL-HOVER-H1000-E
Acoustic Frequency	1000 kHz	
Velocity Accuracy	$\leq \pm 0.4\%$ ± 5 mm/s	
Velocity Range	± 5 m/s	
Max. Data Update Rate	20 Hz (Max.)	
Max. Bottom-Track Altitude	Typical 45 m; >35 m depends on seabed & salinity	Typical 40 m; >35 m depends on seabed & salinity
Min. Bottom-Track Altitude	0.05 m	
Supply Voltage	DC 18~30 V, typical DC 24 V	
Average Power Consumption	≤ 5 W	
Communication Interfaces	UART, 100M Ethernet	
Data Output Format	PD6, EPD6	PD6
Dimension(Dia. × Height)	$\Phi 92$ mm × 33.4 mm	90 mm × 39.5 mm
Weight	445 g (in air); 115 g (in-water)	360 g (in air); 165 g (in-water)
Depth Rating	300 m	1000 m
Cable Assembly	-	D-Sub 9-pin, 50 cm length

Excellent Compatibility | Multi-Vehicle Mounting

DVL-HOVER-H1000 Embedded can be applied to underwater robots of various sizes such as AUVs and ROVs, especially ROVs that need observation and operation in confined tiny spaces. DVL-HOVER-H1000 delivers high-precision long-term bottom-track velocity measurement to enable hovering operations for AUVs and ROVs, allowing AUVs/ROVs to tackle challenging complex underwater current environments.

- Provides 3D bottom-referenced velocity of underwater platforms
- Integrated with inertial navigation for high-precision navigation
- Underwater navigation for ROV / AUV
- Assists ROV in stable anti-current station keeping

