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Compact long range DVL – DVL A250

The Water Linked A250 is a next-generation long-range Doppler Velocity Log (DVL) that pushes the boundaries of compact subsea navigation technology. Building on Water Linked's proven expertise, the A250 delivers exceptional performance with an acoustic range of up to 250 meters, doubling the reach of previous models while maintaining an incredibly small and efficient form factor.

Engineered for reliability and precision, the A250 maintains bottom lock at speeds up to 15 m/s and can operate from altitudes as low as 30 cm, offering seamless performance from ultra-short to ultra-long range. This versatility makes it the ideal DVL for ROVs, AUVs, and USVs across a wide spectrum of missions.

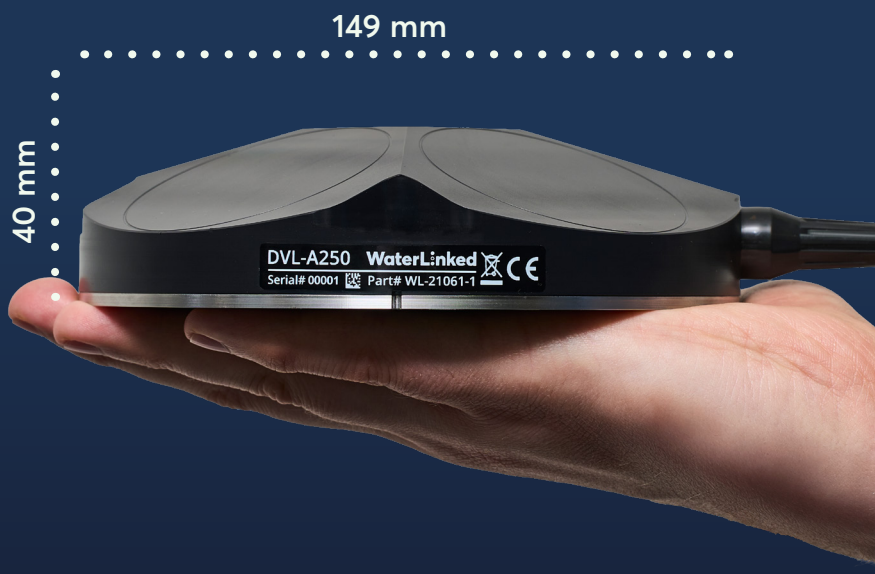
Despite its extended range, the A250 remains exceptionally compact and lightweight, enabling seamless integration even on the smallest underwater vehicles. It is available with a rear-entry O-ring interface (only for 1,000 m depth rating), a 2,5 m side-entry cable or a side-entry Seacon MC8M connector (1,000 m or 4,000 m depth rating).

For applications where full vehicle integration is not required, the A250 includes an integrated AHRS/IMU. This enables dead-reckoning navigation allowing operators to generate track plots of a vehicle's movement without needing a dedicated control interface.

The A250 represents a new standard in compact, high-performance DVLs - delivering unprecedented range, accuracy, and versatility in a form factor designed for the next generation of underwater vehicles.

Key features

- 30 cm – 250 m altitude range
- 1,000 m or 4,000 m depth rated
- Ethernet and Serial Communication
- Embedded computer for standalone operation
- Extremely small size enabling easy mounting and integration
- Web GUI with comprehensive diagnostic features
- Water tracking



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Acoustic | performance

Transducer frequency	250 kHz
Transducer setup	4-beam convex Janus array
Transducer beam angle	22.5 degrees
Ping rate	1 - 15 Hz (adaptive to altitude)
Sensor assist	Integrated AHRS
Min altitude	30 cm
Max altitude	250 meters (dependent on seabed conditions, salinity levels etc.)
Max velocity	15 m/s
Velocity resolution	0.1 mm/s
Long term accuracy	±1.01 % (Standard version), ±0.1 % (Performance version)

Electrical | interface

Input voltage	10 - 30 Vdc
Power consumption (average)	8 W
Power-on current surge	30 W
Physical interface	Rear O-ring entry (2.5 m shielded cable) Side-entry (2.5 m shielded cable) Side-entry (0.4 m Seacon MC8M)
Indicator	Status LED (Power, Lock)
Communication	Ethernet & Serial (RS232)
Protocols	Water Linked API, PD0, PD4, PD6

Mechanical

Diameter	149 mm
Height	40 mm
Weight in air	1.65 kg
Weight in water	0.75 kg
Depth rating	1,000 m - Side or Rear O-ring entry 4,000 m - Side-entry only
Material	PEEK (housing), Stainless Steel 316 (back plate)
Operating temperature	-5 to 55 °C

Approvals

CE

Water Linked AS | Stiklestadveien 1, 7042 Trondheim | info@waterlinked.com

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