

## 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 30cm, 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.

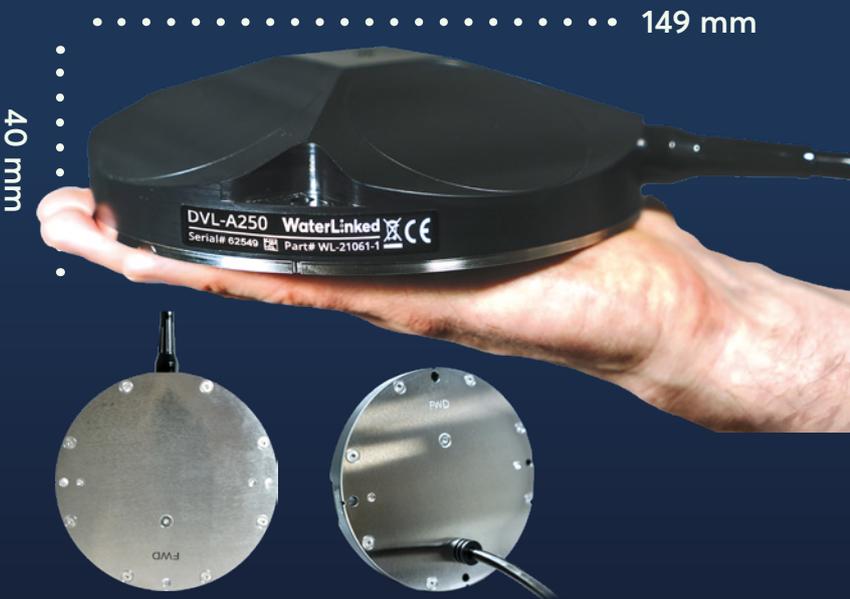
### Key features

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

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 1,000m depth rating featuring an O-ring piston seal for tight integration, or with a 4,000m depth rating in a side-entry cable configuration; ensuring reliable performance in the most demanding deep-sea environments.

For applications where full vehicle integration is not required, the A250 includes an integrated Attitude and Heading Reference System (AHRS). 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.



## 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	Side cable entry version (3m shielded cable) Rear O-ring interface version (1m shielded cable)
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	4,000m (Rear O-ring interface version rated to 1,000m)
Material	PEEK (housing), Stainless Steel 316 (back plate)
Operating temperature	-5 to 55 °C

## Approvals

CE