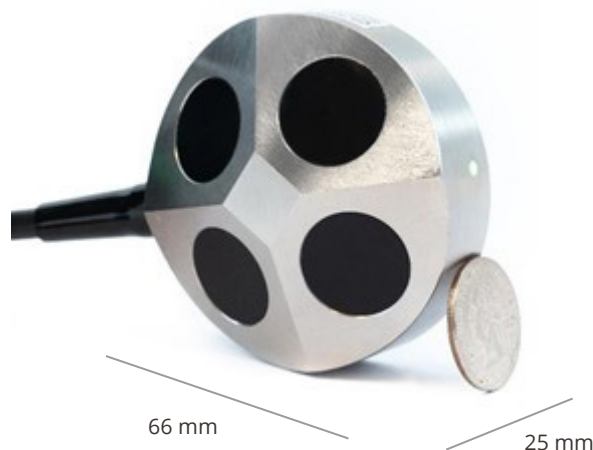


DOPPLER VELOCITY LOG

- DVL A50
WL-21035



DESCRIPTION

The DVL A50 is – by far – the world’s smallest commercially available Doppler Velocity Log.

The A50 is establishing a new market standard with its high performance, ultra-small 4 beam setup, integrated AHRS/IMU assist, open interface protocol and low cost.

The DVL is designed with small ROVs/AUVs in mind where it can be mounted without adding significant weight or drag to the vehicle. The A50 is the perfect fit for small vehicles looking for professional navigation features. The combination of low cost and high performance is also making it very attractive for much larger vehicles.

KEY FEATURES

- Adaptive algorithms enabling a very wide operational altitude of 0.05 – 50 meters.
- Easily integrated using the built-in Ethernet and Serial 115200 baud UART 3,3V interface.
- Fully self-contained with no requirements for external computers, controllers or devices.
- Integrated status LED to confirm that the unit is powered on and if it has bottom lock.
- Extremely small size enabling easy mounting and integration with other equipment.
- Low power consumption.
- Highly robust operation, also in areas with varying seabed conditions.
- Integrated AHRS/IMUs for increased accuracy.
- Web based GUI with comprehensive diagnostic features.

MECHANICAL

Device diameter	66 mm
Device height	25 mm
Device weight (air)	250 grams
Device weight (submerged)	185 grams
Depth rating	300 meters
Material	Stainless Steel 316 (housing) PEEK (transducer caps)
Operating temperature	-5 to 60°C

ELECTRICAL / INTERFACE

Input voltage	10-30 V
Power consumption	0.25A at 12V
Power-on current surge	1.25A at 12V
Physical interface	3 m cable with interface module, 8 wires, PUR pwr/serial/Ethernet
Indicator	Status LED Power, Lock
Communication	UART 115200 baud serial 3,3V Ethernet
Protocols	Water Linked API

CONNECTIONS



ACOUSTIC / PERFORMANCE

Transducer frequency	1 MHz
Transducer setup	4-beam convex Janus array
Transducer beam angle	22.5 degrees
Ping rate	4-26 Hz (adaptive to altitude)
Sensor assist	Integrated AHRS/IMU (Yost Labs TSS-NANO)
Min altitude	5 cm
Max altitude	50 meters (> 35 m is dependent on seabed conditions, salinity levels etc.)
Max velocity	3.75 m/s
Velocity resolution	0.1 mm/s
Long term accuracy	±1.01 % ±0.1 % (Performance version)

APPROVALS

CE

ORDERING GUIDE

