

VAM-600K

Acoustic Velocity-Altitude Meter

Overview



VAM-600K Acoustic Velocity-Altitude Meter delivers high-precision measurement of vehicle velocity relative to the seabed and altitude above seafloor. When combined with compass or INS, it builds an autonomous navigation system to enable vehicle control and high accuracy subsea navigation for surface vessels, underwater towed bodies, AUVs and UUVs.

This unit offers optional current profiling function for measuring water current profiles. It supports underway flow measurement along the vehicle track as well as stationary current profiling when mounted on submerged buoys, surface buoys and other fixed observation platforms.

Technical Specifications

Parameter	Specification
Operating Frequency	600 kHz $\pm$ 1 kHz
Beam Configuration	5 Beams
Center Beam Frequency	400 kHz $\pm$ 500 Hz (optional)
Velocity Accuracy	$\pm$ 0.3% / $\pm$ 0.3 cm/s (export-controlled), >1% (license-free)
Max. Altitude Above Bottom	100 m
Min. Altitude Above Bottom	50 cm
Velocity Range	$\pm$ 10 m/s (default); $\pm$ 20 m/s (max)
Data Update Rate	1 – 2 Hz
Supply Voltage	DC 11 – 32 V
Power Consumption (Average)	8 W
Interface	Ethernet, RS-232, RS-422, RS-485
Data Format	PD6, custom
Dimensions	$\leq$ $\varnothing$ 165 $\times$ 205 mm (Dia. $\times$ H, excluding connector)
Weight in Air	$\leq$ 9.5 kg
Housing Material	Titanium alloy
Depth Rating	100 m (Optional 300 m / 1000 m / 3000 m)