

DVL-150K Phased

Phased-Array Doppler Velocity Log 150kHz



Overview

The DVL-150K is a medium-frequency Doppler Velocity Log designed for reliable underwater velocity measurement and navigation. With phased array technology, automatic bottom/water tracking, and robust depth capability, it offers an ideal balance of range, accuracy, and integration flexibility for ROVs, AUVs, and subsea operations.

TECHNICAL SPECIFICATIONS

Specification	DVL-150K-I	DVL-150K-II
Working Frequency	150 kHz	150 kHz
Array Type	Phased Array	Phased Array
Velocity Range	-10 kn to +15 kn (customizable)	-10 kn to +15 kn (customizable)
Velocity Accuracy	Better than 0.5% ± 0.2 cm/s	Better than 0.3% ± 0.2 cm/s
Maximum Bottom Tracking Depth	300 m	500 m
Current Profiling Capability	10 m fixed layer	10 m fixed layer
Acoustic Array Pressure Resistance	2.4 MPa (customizable)	10 MPa (customizable)
Velocity Measurement Modes	Bottom Tracking / Water Tracking (auto switching)	Bottom Tracking / Water Tracking (auto switching)
Sound Speed Correction	Not required	Not required
Operating Voltage	18 – 36 VDC	18 – 36 VDC
Average Power Consumption	≤ 30 W	≤ 70 W
Electronic Chassis Dimensions	232 × 202 × 112 mm (excluding connectors and base)	300 × 230 × 160 mm (excluding connectors and base)
Phased Array Dimensions	Φ225 × 55 mm (excluding vulcanized cable)	Φ225 × 82 mm (excluding vulcanized cable)
Weight	Phased Array: ~9 kg(excluding watertight cable); Electronics: ~5 kg	Phased Array: <15 kg@ 316L SS (excl. watertight cable; Ti-alloy option for lighter weight); Electronics: <9 kg
Communications	RS-422; PD6 (ASCII);Bottom Track: :BI, :BD;Water Track: :WI, :WD	RS-422; PD6 (ASCII);Bottom Track: :BI, :BD;Water Track: :WI, :WD