DVL333

6000 m

Tracking du fond de 0.3 à 380 m. Profondeur opérationnelle de 6000 m.



The DVL333 is a universal Doppler Velocity Log that combines compact design with unprecedented functionality. It can fly higher in the water column and closer to the seabed than similar equipment, and maximum operational depth is 6000 m. This 333 kHz Doppler Velocity Log is used by industry leaders in the subsea market because of its high accuracy and state-of-the-art technology.

Highlights

- Bottom track from 0.3-380 m range
- Per-ping and per-beam data quality estimates
- 6000 m operational depth

Applications

- Highly accurate subsea surveys
- AUVs with long missions or high accuracy requirements
- Easy integration with leading inertial navigation systems (INS)

Technical specifications

Bottom velocity	
Single ping std @ 1.5 m/s	0.8 cm/s at 1/2 max altitude
Long-term accuracy (1)	±0.1% / ±0.1 cm/s (export-controlled), >1% (license-free)
Minimum altitude	0.1 m
Maximum altitude	375 m (2)
Velocity resolution	Better than 0.01 mm/s
Maximum ping rate (3)	8 Hz
(1) Following standard calibration procedures	
(2) Bottom-track distance dependent on bottom type	
(3) Inquire for more options	

Water tracking	
Minimum accuracy	0.3% of measured value ± 0.3 cm/s
Minimum range	4.0 m

Current profiling	
Minimum accuracy	0.3% of measured value ± 0.3 cm/s
Velocity resolution	0.1 cm/s

Current profiling

Interval	User-specified Nth ping
Maximum range	100 m
Blanking	0.5 m
Cell size	0.5-4.0 m
Max # cells	140

Environmental

Operating temperature	-4 to +40 °C
Storage temperature	-20 to +60 °C
Vibration	IEC60068-2-64
EMC approval	IEC/EN 61000-6-2, 61000-6-3

Mechanical

Depth rating	6000 m
Weight	7.0 kg
Weight in water	4.1 kg
Height	203 mm
Diameter	ø186 mm

Hardware

Frequency of operation	333 kHz
Beam width	4.3°
Configuration	4-beam Janus array convex transducer, 25° beam angle
Internal memory	16 GB / 64 GB optional
Bandwidth	25% centered at transmit frequency

Interfaces

Serial (either serial or ethernet)	Configurable RS-232 or RS-422 Subconn connector, 8-pin male
Ethernet	10/100 Mbits Auto MDI-X. TCP/IP, UDP/IP, HTTP protocols. Fixed IP / DHCP client /Auto IP address assignment. UPnP and Nortek proprietary instrument discovery over Ethernet. IEEE1588/PTP and NTP for absolute time stamping. Multiple simultaneous data format transmission possible.
Data formats	Nortek proprietary w/ 1 ms time stamp accuracy, NMEA0183, 0D0, PD4, PD5, PD6
Trigger	Internal 1, 2, 3, 4, 5, 6, 7 or 8 Hz or Trigger In. Trigger option through command (Ethernet or serial) External TTL or 485 lines: (configurable Rising/Falling/Edges)

Sensors

Pressure	0.1% FS /precision better than 0.002% of full scale per sample
Temperature	-4° to +40 °C ± 0.1 °C

Power

DC input	12-48 V
Maximum continuous current	1.5 A
Average power	4.0 W*

Power

- Power based on 1 Hz sampling and altitude with greatest transmit pulse.

Materials

Standard models	POM and titanium housing