

Speed Log

Integration of speed sensor for speed measurement logging

Speed Log

The ION Speed Log is the latest enhancement of the 5000 series platform. The modular design construction of the 5000 series bird allows for the integration of a speed sensor for the logging of dynamic speed measurements at specific attachment points on the towed seismic streamer. ION's business philosophy is to continually improve our products and create new innovative solutions for the seismic industry. As seismic streamer lateral separation requirements decrease to 25-50 meters or less, it is imperative that the streamer speed is monitored and modeled for its towing characteristics.



AcousticBIRD

The 5110 acoustic module is compatible with DigiRANGE acoustic technology thus improving positional accuracy, reducing in water range acquisition time and increased network density.

- Non-corrosive outer body
- Multiple processor architecture
- User selectable speed sample rate
- SLB-150 CC battery pack
- Centralized Windows-based shipboard control and diagnostic system for depth control, acoustic positioning, heading, speed of sound and speed through water measurements
- Compatible with ION FSK repeater technology for extended streamer deployments (up to 12 km)
- QuickCUFF™ compatible for rapid deployment and retrieval
- Worldwide 24 hour support and training



Specifications

Physical Characteristics

Housing	ION Uni-body Platform
Weight in air	8.32 kg (18.3 lb)
Weight in sea water with batteries	2.78 kg (6.1 lb)
Length	1.2 m (48.2 in)
Mounting	Industry standard collars on 0.57 m (22.5 in) centers

Operating Environment

Operating Temperature	-2° to +40°C (+28F to +104°F)
Storage Temperature	-40°C to +70°C (-40°F to +158°F)
Maximum Tow Speed	10 knots
Maximum Pitch Angle	±5 degrees
Shock	1 m drop test onto hard surface

Communications

Type	Serial FSK
Data Rate	2400 bits/s
Data Output	Binary data message, poll on demand
Default Sample Rate	Every shot interval

Flow Speed

Measurement Range	1.5 to 10 knots
Resolution	0.01 knots
Accuracy (RMS)	±0.12 knots, for angle of < 3°
Survival Depth	200 m (656 ft)

Depth

Depth Control Functionality	None
Measurement Range	0 –122 m (0-400 ft)
Maximum Operating Depth	122 m (400 ft)
Survival Depth	244 m (800 ft)

Batteries (Sold and shipped separately)

Cells	SLB-150 CC battery pack
Life	280 days (typical) at 30 s sample rate

System

System Data Display	Status, flow speed, and depth for each active device; text view only; updated each scan cycle
Calibration	2 years

Order Information

Speed Log	9000-7500
SLB-150 CC Battery Pack	4000-253
Kit Spares Speed Log	6500-90
Speed Log Manual	4200-053
Electronic Copy 4	200-053E