

OEM Sound Velocity Sensors

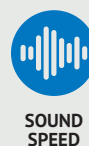
Teledyne Valeport's "Time of Flight" sound velocity technology is available in a number of standard instrument packages, which we believe cater for the majority of applications requiring the ultimate in SV measurement.

However, our in-house design and manufacture capability means that we are able to provide customized versions of this technology to suit less mainstream or emerging applications, or for integration into third party systems either as stand alone systems or those that are require a separate PCB and sensor.

Please contact Teledyne Valeport to discuss your requirements.

DATA SHEET

Product Details



Sensor Specification	
Instantaneous response; the digital measurement is also entirely linear, giving predictable performance under all conditions.	
Acoustic Frequency	2.5 MHz
Range	1375 - 1900 m/s
Resolution	0.001 m/s
Accuracy	Dependent on sensor size
50mm	Total max theoretical error ±0.019 m/s
25mm	Total max theoretical error ±0.020 m/s
The accuracy figure quoted is a worst case scenario based on Total Error Budget, as detailed above. Accuracy is independent of sample rate, since each reading is derived from a single acoustic pulse. No RMS filtering or data averaging is used to derive the quoted accuracy.	

Data Output	
Type	RS232 & RS485 output, selected by command code
Baud Rate	2400 - 115200 (NB. Low baud rates may limit data rate)
Protocol#	8 data bits, 1 stop bit, No parity, No flow control
Sample Rate	1, 2, 4, 8, 16, 32 or 60 Hz, or sample on demand
Format	Choose from mm/s (1510123), m/s to 3 decimal places (1510.123), or m/s to 2 decimal places (1510.12)

Electrical	
Voltage	8 - 30 V DC
Power	0.25 W

Physical	
Please refer to factory for detailed dimensions if required.	
Depth Rating	6000 m
Bulkhead & Reflector	Titanium
Transducer Window	Polycarbonate
Sensor Legs	Carbon Composite
Circuit Board	85 x 27mm

Ordering		
OEM units come with a test lead only.		
Configuration	50 mm	25 mm
Bulkhead OEM	0652002	0652003
Remote OEM	0652008	0652009
Example Custom & OEM Applications		
<ul style="list-style-type: none">• Bespoke engineering solutions• Acoustic Positioning Transponders• Seismic Streamers• AUVs• Gliders• Ultra-Deep water• Non-Aquatic Environments		