





# RapidPro SVT

The rapidPro SVT has been developed for the rapid collection of sound velocity profiles, without compromising the quality of the data. Now further developed with a new optimised shape and removable ProLogger module that combines a rechargeable lithium ion battery, data logger, GPS receiver and Bluetooth comms module.

Valeport's digital time of flight Sound Velocity sensor with virtually instantaneous response time, data acquisition rates of up to 32Hz housed in a low drag housing result in the highest quality profiles at drop rates up to 5 m/s.

Optionally, the rapidPro SVT is designed to operate with the Teledyne OceanScience rapidCAST underway profiling winch to deliver the highest quality SVT casts on the move. While the vessel is underway profiles of up to 450m at 6 knots, are expected.

# **DATA SHEET**

**Product Details** 





**TEMPERATURE** 



CONNECT SOFTWARE

















#### **Sensor Specifications**

The rapidPro SVT is fitted with Valeport's digital time of flight sound velocity sensor, strain piezo-resistive transducer and thermistor temperature sensor.

#### **Sound Velocity**

Range	1375 - 1900m/s
Resolution	0.001m/s
Accuracy	±0.02m/s
Response	31.25 milliseconds

#### Pressure

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Range	200 Bar (max)
Resolution	0.001% range
Accuracy	±0.01% range
Response	31.25 milliseconds

### Temperature - high performance thermistor

Range	-5°C - +35°C
Resolution	0.001°C
Accuracy	±0.01°C
Response	50 milliseconds

#### **Data Acquisition**

Sample Rate: dependent on configuration.

Rate	SVP & Temp	Depth Resolution
16Hz	~	~40cm
32Hz	V	~20cm

The temperature sensor gives valuable information about the physical structure of the water column

### **Communications**

Through the ProLogger an integral Bluetooth module for configuration & data recovery also, when removed from the rapidPro housing USB serial comms directly to a PC.

## Memory

The rapidPro SVT Profiler is fitted with an SD card with more than sufficient capacity.

Electrical	
Battery	Rechargeable Lithium Ion battery module
Battery Life	approximately 20 hours continuous operation from a fully charged pack*

\*battery consumption estimates are based on recording down casts only at 8Hz observation period.

Physical		
Materials	Titanium/PEEK housing Stainless steel 316 nose casting Titanium & composite sensor components	
Depth Rating	2000m	
Instrument Size	Ø62mm x Length 605mm	
Weight	4.5kg (in air)	

#### Software

System is supplied with Valeport Connect PC software, for instrument setup, data extraction and display. Valeport Connect PC software is licence free.

Ordering		
0660046-TS-100	rapidPro SVT Profiler with Sound Velocity, Pressure (1 000m) and Temperature (Thermistor)	
0660046-TS-200	rapidPro SVT Profiler with Sound Velocity, Pressure (2 000m) and Temperature (Thermistor)	
Supplied with	1x ProLogger module     2x switch keys     Bluetooth module with external antenna	

- and cable

- Valeport Connect PC software
  Operating manual and system transit case





