



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, GNSS receiver and wireless 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



SOUND
SPEED



TEMPERATURE



CONNECT
SOFTWARE



WIRELESS



USB



Rechargeable
Battery



GNSS

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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

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 | ✓ | ~20cm |

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

Communications

Through the ProLogger an integral wireless 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
- Tool kit
- Valeport Connect PC software
- Operating manual and system transit case

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