



## miniSVP – DR Direct Reading SVP



The miniSVP – DR is an adaptation of the miniSVP. It has been optimised for ROV operations with a direct reading interface only and no internal battery or logging. It provides a cost effective tool for the collection of Sound Velocity Profiles, without compromising the quality of the data.

### Sensors

The miniSVP is fitted with Valeport's digital time of flight sound velocity sensor, a PRT temperature sensor, and strain gauge pressure transducer.

#### Sound Velocity

Range: 1375 - 1900m/s  
Resolution: 0.001m/s  
Accuracy: ±0.02m/s

#### Temperature

Range: -5°C to +35°C  
Resolution: 0.001°C  
Accuracy: ±0.01°C

#### Pressure

Range: 5, 10, 30, 50, 100, 300 or 600 Bar  
Resolution: 0.001% range  
Accuracy: Options: ±0.01% range  
±0.05% range

### Data Acquisition

The miniSVP features a selection of pre-programmed sampling regimes, covering many standard applications. Data may be sampled from 1 to 16Hz, making it suitable for rapid profiling or for continuous measurement at a fixed point

### Sampling Modes

Continuous: Regular output from all sensors at 1, 2, 4, 8 or 16Hz.  
Profile: Logs data as the device falls (or rises) by a defined amount through the water column.

### Communications

The instrument will operate autonomously, with setup and data extraction performed by direct communications with PC before and after deployment. It also operates in real time, with a choice of communication protocols fitted as standard and selected by pin choice on the output connector:

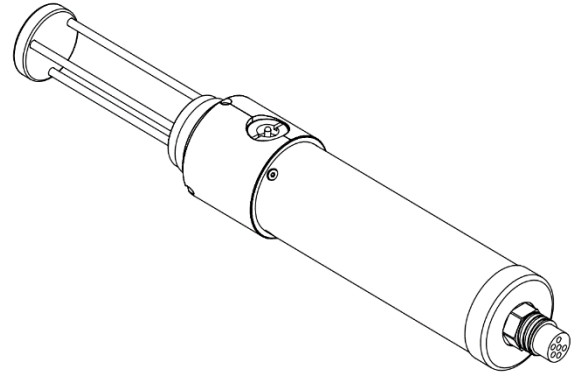
RS232 Up to 200m cable, direct to serial port  
RS485 Up to 1000m cable  
Baud Rate: 4800 - 460800  
Protocol: 8 data bits, 1 stop bit, No parity, No flow control

### Software

System is supplied with DataLog x2 Windows based PC software, for instrument setup, and display. DataLog x2 is license free.

### Electrical

External: 9 – 28V DC  
Connector: SubConn MCBH10F



### Physical

Materials: Acetal or Titanium housing (as ordered)  
Polyurethane and ceramic sensor components  
Stainless steel (316) deployment cage  
Depth Rating: Acetal: 500m / Titanium: 6000m  
NB: Maximum deployment depth may be limited by transducer range  
Instrument Size: Main Housing: 48mmØ  
Sensor Body: 54mmØ  
Length: 334mm (excluding connector)  
Deployment Cage: 110mmØ x 450mm long  
Weight: 1kg (Acetal)  
1.8kg (Titanium)

### Ordering

0660027-XX Direct Reading miniSVP – Acetal housing, 500m rated  
Fitted with:  
Carbon Composite time of flight Sound Velocity Sensor  
0.05% accuracy pressure sensor and PRT temperature sensor  
Supplied with: deployment cage, 3m Y lead, tool kit, x2 DataLog software, operating manual and system transit case  
0660030-XX Direct Reading miniSVP – Acetal housing, 500m rated  
Fitted with:  
Carbon Composite time of flight Sound Velocity Sensor  
0.01% accuracy pressure sensor and PRT temperature sensor  
Supplied with: deployment cage, 0.5m "Y" lead, tool kit, x2 DataLog software, operating manual and system transit case  
0660031-XX Direct Reading miniSVP – Titanium housing, 6000m rated  
Fitted with:  
Carbon Composite time of flight Sound Velocity Sensor  
0.01% accuracy pressure sensor and PRT temperature sensor  
Supplied with: deployment cage, 0.5m "Y" lead, tool kit, x2 DataLog software, operating manual and system transit case  
0660041-XX Direct Reading miniSVP – OEM version  
Fitted with:  
25mm Carbon Composite time of flight Sound Velocity Sensor  
0.05% accuracy pressure sensor and PRT temperature sensor  
Supplied with: interface lead, operating manual and system transit case.

Note: **XX** denotes pressure transducer range.  
Acetal Housing: select from 5, 10, 30 or 50 bar  
Titanium Housing: select from 5, 10, 30, 50, 100, 300 or 600 bar