



miniSVP

Sound Velocity Profiler

The miniSVP has been developed to provide a cost effective tool for the collection of Sound Velocity Profiles without compromising the quality of the data. Ideally suited to hydrographic survey operations, from coastal to deep water, the miniSVP will appeal to survey companies and academia alike, being simple to use and easy to handle.

DATA SHEET

Product Details



SOUND
SPEED



DATALOG
X2 SOFTWARE



Bluetooth

Valeport Limited
St. Peter's Quay, Totnes,
Devon TQ9 5EW United Kingdom

Telephone: +44 (0) 1803 869292
Email: sales@valeport.co.uk
www.valeport.co.uk



Sensors

Fitted with Valeport's digital time of flight sound velocity sensor, a PRT temperature sensor, and piezo-resistive pressure transducer.

Sound Velocity

Range 1375 - 1900m/s

Resolution 0.001m/s

Accuracy ±0.02m/s

Temperature

Range -5°C - +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 ±0.05% range

Data Acquisition

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

Will operate autonomously, with setup and data extraction performed by direct communications with PC. 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 38400, 57600 or 115200

Protocol 8 data bits, 1 stop bit, No parity, No flow control

Bluetooth Bluetooth logger and communication set available for cable free data recovery. Bluetooth module is limited to a depth rating of 500m.

Memory

Fitted with a solid state non-volatile Flash memory, capable of storing over 10 million lines of data (equivalent to 10,000 profiles to 500m, at 1m profile resolution).

Electrical

Internal 1 x C cell, 1.5V alkaline or 3.6V lithium

External 9 – 28V DC

Power <250mW

Battery Life approximately 30 hours operation (alkaline)
approximately 90 hours operation (lithium)

Connector SubConn MCBH10F

Physical

Materials Acetal or Titanium housing (as ordered)
Polycarbonate & Composite sensor components.
Stainless steel (316) deployment cage

Depth Rating 500m (Acetal)
6000m (Titanium)

Note: Maximum deployment depth may be limited by pressure transducer range

Instrument Size Main Housing: 48mmØ
Sensor Body: 54mmØ
Length: 435mm (including connector)

Deployment Cage 110mmØ x 450mm long

Weight 0.8kg (Acetal) | 1.6kg (Titanium)

Shipping 51 x 42 x 27cm | 10kg

Software

The system is supplied with DataLog X2 software, for instrument setup, data extraction and display. DataLog X2 is licence free.

Ordering

0660001-XX miniSVP Sound Velocity Profiler in Acetal
Supplied with:
• Deployment cage
• Switch plug
• 3m comms lead
• DataLog X2 software
• Manual and transit case

0660001BT-XX miniSVP Sound Velocity Profiler in Acetal
Supplied with:
• Deployment cage
• Switch plug
• Bluetooth logger/communication set
• DataLog X2 software
• Manual and transit case

Note: **XX** denotes pressure transducer range
Select from 5, 10, 30 or 50bar

0660002-XX miniSVP Sound Velocity Profiler in Titanium
Supplied with:
• Deployment cage
• Switch plug
• 3m comms lead
• DataLog X2 software
• Manual and transit case

Note: **XX** denotes pressure transducer range.
Select from 5, 10, 30, 50, 100, 300 or 600 Bar

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