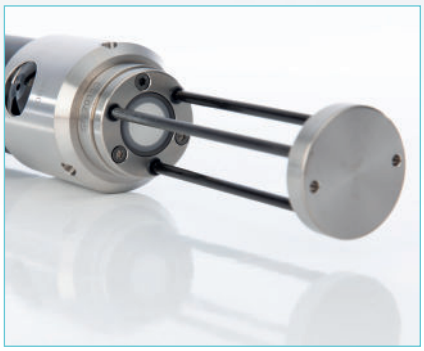

miniSVP
Sound Velocity Profiler

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

WIRELESS

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

VALEPORT

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
Wireless	Wireless logger and communication set available for cable free data recovery. Wireless 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 • Wireless 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

Datasheet Reference: miniSVP | July 2023