



uvSVX

Sound Velocity, Temperature, Pressure with calculated Salinity & Density for an Underwater Vehicle

Aimed primarily at the underwater vehicle market, the uvSVX is a compact direct reading instrument that outputs a selectable, fixed data string at up to 60Hz of Sound Velocity, Temperature, Depth and optionally, Salinity and Density calculated with Valeport's proprietary DASH formula.

High accuracy data is assured with the added bonus of Valeport's unique interchangeable pressure module that allows customers to maximise operationally specific depth requirements. This innovative pressure module, with integral calibration, can be changed in a couple of minutes without opening the instrument and is available in 0.01% accuracy 10, 20, 30, 50, 100, 200, 300, 400 and 600 Bar.

Vibration and Shock tested to the standard ISO 13628-6:2006 (Q2 Levels).

DATA SHEET

Product Details



MULTI-PARAMETER



SOUND SPEED



BATHYMETRY



**VALEPORT CONFIGURE &
DATALOG X2 SOFTWARE**

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Sensors

Each sound velocity measurement is made using a single pulse of sound traveling over a known distance, so is independent of the inherent calculation errors present in all CTDs. Our unique digital signal processing technique virtually eliminates signal noise, and gives an almost instantaneous response; the digital measurement is also entirely linear, giving predictable performance under all conditions.

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

Interchangeable Pressure Sensor Module

Range	10, 20, 30, 50, 100, 200, 300, 400 & 600 Bar
Resolution	0.001% range
Accuracy	±0.01% range
Units	dBar (default option) Meters Feet

Calculated Parameters and Accuracies Calculations based on Valeport's proprietary DASH formula

Salinity	Salinity ±0.05 PSU
Density	Density ±0.05 kg/m ³

Data Output

RS232 & RS485 or Ethernet output. RS232 data may be taken directly into a PC over cables up to 200m long, whereas RS485 is suitable for longer cables (up to 1000m) and allows for multiple addressed units on a single cable

Baud rate	2400-230400
Protocol	8 data bits, 1 stop bit. No parity. No flow control
Modbus	8NI or 8EI framing
Format	RS232 & RS485

ASCII text data format compatible with Valeport DataLog X2 and BathLog software, allowing real-time depth correction using Density Profiles

Physical

Housing	Titanium
Size	78mmØ x 218mm (excluding connector)
Connector	SubConn MCBH6F
Vibration & Shock	Tested to standard ISO 13628-6:2006 (Q2 Levels)
Depth Rating	6000m
Weight	1.9kg (in air)
Shipping	42 x 32 x 30cm, 5kg

Electrical Voltage

Input	9-28V DC (isolated)
Power	RS232 & RS485 - 30mA @ 12V DC Ethernet - 130mA @ 12V DC

Software

Valeport Configure has been introduced to simplify the configuration of instruments prior to deployment. It can be used instead of DataLog X2.

Ordering

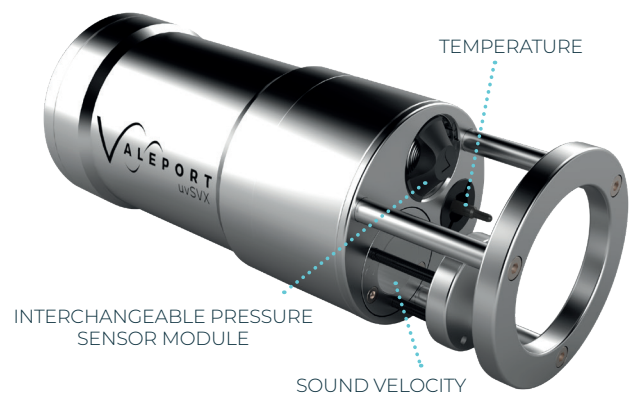
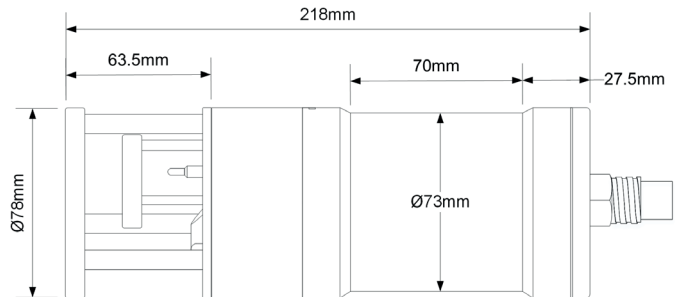
0650030-XXX	for RS232/RS485 version Supplied with: • 0.5m interface cable • Operation manual and transit case
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0650031-XXX	for Ethernet version Supplied with: • 0.5m interface cable • Operation manual and transit case
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Note	XX denotes pressure transducer range. Select from 10, 20, 30, 50, 100, 200, 300, 400 or 600 Bar Two communication options of the uvSVX will be offered, RS232 / RS485 and Ethernet
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PTSA-XXX	Additional interchangeable pressure modules
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Note	XX denotes pressure transducer range. Select from 10, 20, 30, 50, 100, 200, 300, 400 or 600 Bar
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