



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 ± 0.02 m/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/m³

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 8N1 or 8E1 framing

Format RS232 & RS485

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

Physical

Housing Titanium

Size 78mm \varnothing 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

Ordering

0650030-XXX for RS232/RS485 version
Supplied with:
• 0.5m interface cable
• Operation manual and transit case

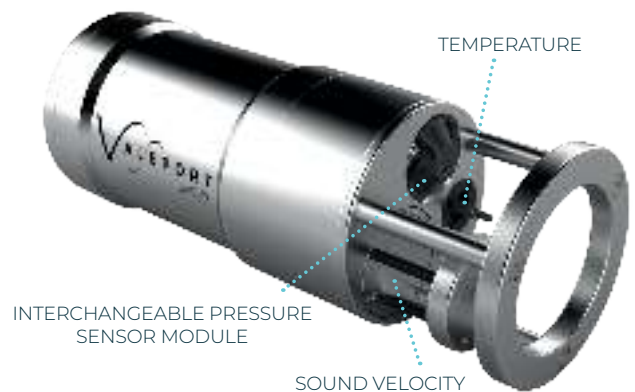
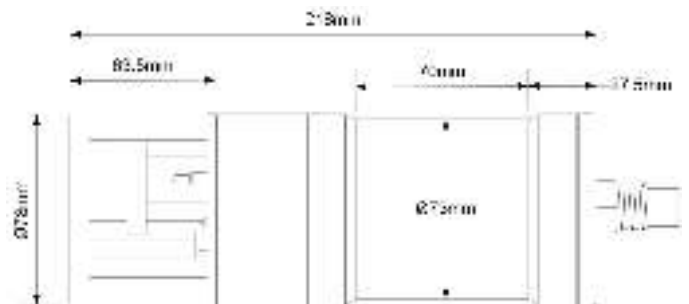
0650031-XXX for Ethernet version
Supplied with:
• 0.5m interface cable
• Operation manual and transit case

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

PTSA-XXX Additional interchangeable pressure modules

Note XX denotes pressure transducer range.
Select from 10, 20, 30, 50, 100, 200, 300, 400 or 600 Bar



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