# UV-SVP — Sound Velocity, Temperature and Pressure for an Underwater Vehicle

Based on the Valeport miniSVS, the UV-SVP offers a form-factor designed for Underwater Vehicles where space is at a premium. Incorporating Valeport's class leading time of flight sound speed sensor, a PRT temperature sensor and a 0.01% pressure sensor in a compact package weighing just 750 grams (in air), the lightweight titanium housing gives a depth rating of 3000m. A wide range (9-30V DC) isolated power supply and RS232 communications complete the package.

## Sensors

### Sound Velocity

Each sound velocity measurement is made using a single pulse of sound travelling 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.

| | |
|---|---|
| Range: | 1375 - 1900m/s |
| Resolution: | 0.001m/s |
| Accuracy: | ±0.020m/s |

### Temperature

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

### Pressure

| | |
|---|---|
| Range: | 10, 30, 100, 300 |
| Resolution: | 0.001% range |
| Accuracy: | ±0.01% range |

## Data Output

RS232 & RS485 output, selected by command code. 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: | 19200 - 115200 |
| Protocol: | 8 data bits, 1 stop bit, No parity, No flow control |

## Electrical

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|---|---|
| Voltage: | 8 – 30V DC Isolated |
| Power: | 0.35W |
| Connector: | SubConn MCBH6F |

## Physical

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|---|---|
| Depth Rating: | 3000m |
| Weight: | 0.75 kg (in air) |
| Housing & Bulkhead: | Titanium |

## Ordering

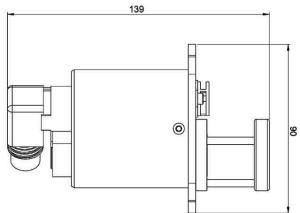| | |
|---|---|
| 06520549-XX | Supplied with:<br>• 0.5m interface cable<br>• Operation manual and transit case |
| Note: | XX denotes pressure transducer range.<br>Select from 10, 30, 50, 100, 300, or 600 Bar |

As part of our policy of continuing development, we reserve the right to alter at any time, without notice, all specifications, designs, prices and conditions of supply of all equipment