DATA SHEET

UV-SVP

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

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/RS485 communications complete the package.

Product Details

MULTI-PARAMETER CTD

SOUND SPEED

DASH FORMULA

VALEPORT TERMINAL SOFTWARE

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VALEPORT

Sensors

Sound Velocity

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.

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

Temperature

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

Pressure

Range	10, 20, 30, 50, 100, 200 & 300 Bar
Resolution	0.001% range
Accuracy	±0.01% range

Calculated Parameters and Accuracy

Calculations based on Valeport's proprietary DASH formula

Salinity	±0.05 PSU
Density	±0.05 kg/m³

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.

Sample rate	30Hz
Baud rate	19200 - 115200
Protocol	8 data bits, 1 stop bit, No parity, No flow control

Electrical

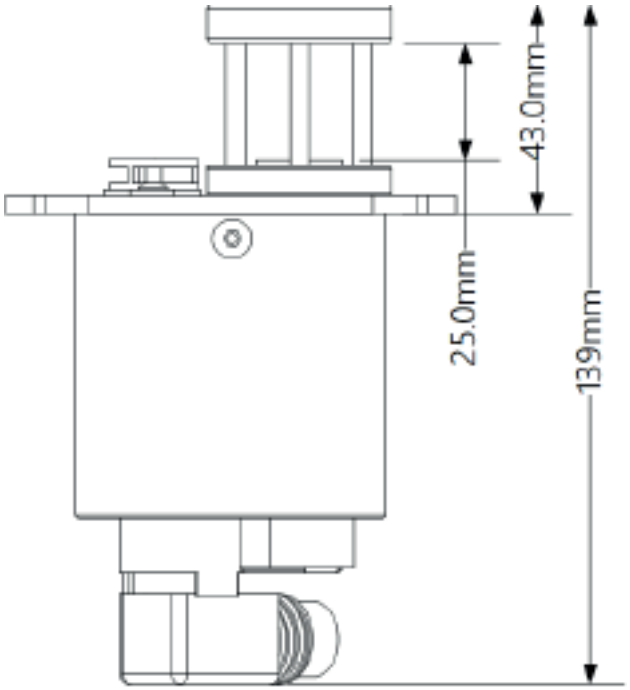
Voltage	8 – 30V DC Isolated
Power	0.35W
Connector	SubConn MCBH6F

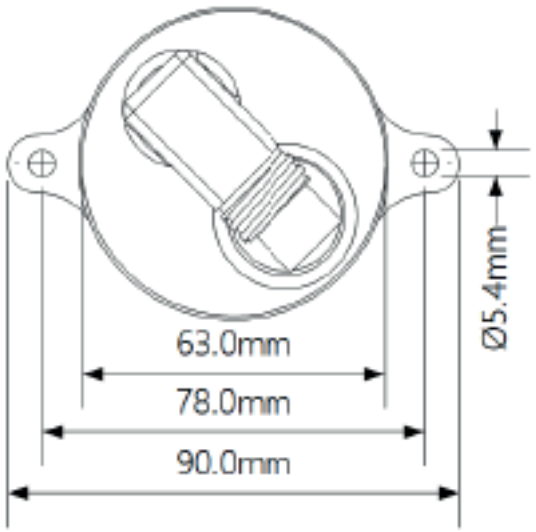
Physical

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

Ordering

06520549-XX	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 Bar





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