



## DATA SHEET

### Product Details



**MULTI-PARAMETER  
CTD**



**SOUND  
SPEED**



**CONNECT  
SOFTWARE**



Bluetooth



USB



Rechargeable  
Battery



GPS

# SWiFT SVP

## Sound Velocity Profiler

Designed from the outset with the intention of a seamless workflow, the SWiFT profiler provides survey-grade sensor technology coupled with the convenience of Bluetooth connectivity and rechargeable batteries.

An integral GPS module, to geo-locate each profile, completes the package. Data can be easily and quickly downloaded and reviewed wirelessly, via Bluetooth, using the SWiFT App on iOS devices and instantly shared, in industry standard SVP formats through email and cloud services. Using the provided USB adapter or cable, Valeport's DataLog x2 software package provides further tools.

In addition to the directly measured sound speed, temperature and pressure observations, Conductivity, Salinity and Density are calculated using Valeport's proprietary algorithm developed from extensive laboratory and field work.



With an operational battery life of up to 5 days and the convenience of charging via USB, SWiFT is intended for coastal, harbour and inland hydrographic survey use and offers the highest quality sound velocity profiles in a compact, robust and portable package. Optionally, the supplied deployment weight is available to bolt onto the sensor protection cage to help get the SWiFT to depth in fast flowing currents.

Sensor Specifications	
The SWiFT SVP is fitted with Valeport's digital time of flight sound velocity sensor, temperature compensated piezo-resistive pressure transducer and a PRT temperature sensor	
Sound Velocity	
Range	1,375-1,900 m/s
Resolution	0.001 m/s
Accuracy	±0.02 m/s
Pressure	
Range	50 Bar
Resolution	0.001% FS
Accuracy	±0.01% FS
Temperature	
Range	-5°C to +35°C
Resolution	0.001°C
Accuracy	±0.01°C
Calculated Parameters and Accuracies	
Calculations based on Valeport's proprietary DASH formula	
Conductivity	±0.05 mS/cm
Salinity	±0.05 PSU
Density	±0.05 kg/m <sup>3</sup>
Physical	
Materials	Titanium   Stainless Steel deployment weight
Depth Rating	500m
Dimensions	ø78mm x Length 264mm
Weight	2.0kg (in air) / 0.9kg (in water)   3.0kg (in air) / 1.8kg (in water) with deployment weight

Communications (set up and data offload)	
USB Serial	
Bluetooth v4 - low energy	
Electrical	
Battery	Internal rechargeable battery pack
Battery life	Up to 5 days operations
Charging	USB Typically, 1 hour fast charge will give 12 hours operation
Software	
iOS App for Bluetooth compatible mobile devices - instrument set up, data offload, display and translation to common SVP formats, Android to follow. Valeport's Connect PC software, with both USB cable and Bluetooth connectivity, for instrument setup, data extraction, display and translation to common SVP formats.	
Ordering	
Sub Title	
USB Serial	
Bluetooth v4 - low energy	
0660047 50	SWiFT SVP Profiler Titanium housing rated to 500m
Supplied with	Deployment weight PC Bluetooth adapter USB interface and charging cable 1.5 A charger Valeport Connect software Operating manual System transit case

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