





SWIFT SVP

Sound Velocity Profiler

Designed from the outset with the intention of a seamless workflow, the SWiFT SVP profiler provides survey-grade sensor technology coupled with the convenience of Bluetooth® connectivity and rechargeable batteries. An integral GNSS module, to geo-locate each profile, completes the package. Data can be easily and quickly downloaded and reviewed wirelessly via Bluetooth connectivity using Valeport's Ocean software for Windows, iOS or Android. Data can be instantly shared, in industry standard data formats through email and cloud services. A USB Cable and Bluetooth adapter are provided.

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 SVP 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 SVP to depth in fast-flowing currents.

DATA SHEET

Product Details





MULTI-PARAMETER















Sensor Specifications

Salinity

Density

±0.05 PSU

 $\pm 0.05~kg/m^3$

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 – +35°C	
Resolution	0.001°C	
Accuracy	±0.01°C	
Calculated Parameters and Accuracy		
Calculations based on Valeport's proprietary DASH formula		
Conductivity	±0.05 mS/cm	

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 Li-ion battery pack
Battery life	Up to 5 days operations
Charging	USB Typically, 1 hour fast charge will give 12 hours operation

Software

iOS and Android Valeport Connect Pathway Edition for Bluetooth compatible mobile devices – instrument set up, data offload, display and translation to common data formats. Valeport's Ocean PC software, with both USB cable and Bluetooth connectivity, for instrument setup, data extraction, display and translation to common data formats.

Instrument and data time is synchronised to GNSS, UTC.

Ordering

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



Stainless steel deployment weight





