



## **SWIFT SVP**

# Sound Velocity /Temperature/ Pressure Salinity /Conductivity / Density







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

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Sound Velocity	
Range:	1375 – 1900 m/s
Resolution:	0.001 m/s
Accuracy:	±0.02 m/s
Pressure	
Range:	10 Bar or 20Bar
Resolution:	0.001% FS
Accuracy:	±0.05% FS
Temperature	
Range:	-5°C to +35°C
Resolution:	0.001°C
Accuracy:	±0.01°C
Calculated Accu	uracies
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:	200m
Dimensions:	Ø78mm x Length 277mm
	321mm with deployment weight
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

#### Memory

2 GB Internal Flash Card Storage

#### Electrica

Battery:	Internal Rechargeable Battery Pack
Battery Life:	Up to 5 days of operations
Charging:	USB
	typically, 1 hour fast charging will give 12 hours operation

#### Software

iOS App for Bluetooth 4 compatible iPad and iPhone – instrument set up, data offload, display and translation to common SVP formats, Android to follow.

DataLog x2 Windows based PC software, with both USB cable and Bluetooth 4 connectivity, for instrument setup, data extraction, display and translation to common SVP formats.

#### Ordering

	0660047 XX	SWIFT SVP Profiler -
		Titanium housing rated to 200m
Note: XX pressure transducer range - select fro		XX pressure transducer range - select from 10 or 20 Bar
		Supplied with:
		Deployment weight
		20m deployment line
		PC Bluetooth adapter
		USB interface and charging cable
		1.5 A charger
		<ul> <li>DataLog x2 software, operating manual</li> </ul>
		System transit case