



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 through email and cloud services. Using the provided USB cable, Valeport's DataLog x2 software package provides further tools including translation to common SVP formats.

In addition to the directly measured SV, Temperature and Pressure, Swift calculates Salinity and Density using a proprietary Valeport algorithm developed from extensive laboratory and fieldwork. This algorithm gives an accuracy of 0.05 pSU for salinity and 0.05 g/m³ for density.

With an operational battery life of up to 5 days and the convenience of charging via USB the 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 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: 1375 – 1900 m/s
Resolution: 0.001 m/s
Accuracy: ±0.02 m/s

Pressure

Range: 10 Bar / 100m
Resolution: 0.001% FS
Accuracy: ±0.05% FS

Temperature

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

Physical

Materials: Titanium and Acetal.
Stainless Steel deployment weight
Depth Rating: 100m
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 v4.0 - low energy

Memory

2 GB Internal Flash Card Storage

Electrical

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

Software

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

Android to follow

DataLog x2 Windows based PC software, for instrument setup, data extraction, display and translation to common SVP formats

Ordering

0660047 SWiFT SVP Profiler
Titanium housing rated to 100m
Supplied with:

- Deployment weight
- 20m deployment line
- USB interface and charging cable
- 1.5 A charger
- DataLog x2 software, operating manual
- System transit case.

Datasheet Reference: SWiFT SVP, September 2015