



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 data formats through email and cloud services. Using the provided USB adapter or cable.

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.

DATA SHEET

Product Details



SOUND
SPEED



MULTI-PARAMETER
CTD



CONNECT SOFTWARE



Bluetooth



USB



Rechargeable
Battery



GPS

Valeport Limited
St. Peter's Quay, Totnes,
Devon TQ9 5EW United Kingdom

Telephone: +44 (0) 1803 869292
Email: sales@valeport.co.uk
www.valeport.co.uk



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 – +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

Salinity ±0.05 PSU

Density ±0.05 kg/m³

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 App for Bluetooth compatible mobile devices – instrument set up, data offload, display and translation to common data 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 data formats.

Instrument and data time is synchronised to GPS, 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



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