



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®** wireless technology 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 a large internal Lithium-ion rechargeable battery 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



SOUND
SPEED



MULTI-PARAMETER
CTD



OCEAN & CONNECT PATH-
WAY EDITION
SOFTWARE



USB



Rechargeable
Battery



GNSS

TAE KWANG ELECTRONICS CORPORATION
5TH FLR., K-BLDG., 3, SANGAM-RO 41GIL,
GANGDONG-GU, SEOUL 05307, KOREA

PHONE : 02 479 2703 ~ 4
e-mail : taekwang@tkec.co.kr
Website: www.tkec.co.kr



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 $\pm 0.01\%$ FS

Temperature

Range $-5^{\circ}\text{C} - +35^{\circ}\text{C}$

Resolution 0.001 $^{\circ}\text{C}$

Accuracy $\pm 0.01^{\circ}\text{C}$

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 500 m

Dimensions $\varnothing 78$ mm x Length 264 mm

Weight 2.0 kg (in air) / 0.9 kg (in water) | 3.0 kg (in air) / 1.8 kg (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 SWiFT Battery endurance depends on the sampling scenario used – contact Valeport for more information.

100 days endurance 5 profiles per day to 100 m*
70 days endurance 3 profiles per day to 500 m*
5 days continuous running (normal power mode)

(*Utilising Bluetooth Sleep mode)

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 500 m

Supplied with Deployment weight
PC Bluetooth adapter
USB interface and charging cable 1.5 A charger
Valeport Connect software
Operating manual
System transit case



The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Valeport Ltd is under license. Other trademarks and trade names are those of their respective owners.

Datasheet Reference: SWiFT SVP | April 2024

As part of our policy of continuing development, Valeport Ltd. reserve the right to alter at any time, without notice, all prices, specifications, designs and conditions of sale of all equipment - Valeport Ltd © 2024

