



SWiFT SVPplus Rhodamine

Multi-parameter profiler

Valeport's SWiFT SVPplus Multi-Parameter Profiler with a Rhodamine sensor combines survey-grade sound speed, temperature and pressure sensor technology with Fluorometer observations. The package is completed with the convenience of **Bluetooth®** wireless technology, rechargeable battery and an integral GNSS module to geo-locate each profile.

- Multi-Parameter Profiler
 - CTD, Sound Speed, Salinity, Density
 - Up to 32Hz sampling rate
 - Rhodamine sensor
- Bluetooth and USB connectivity
- Integral GNSS receiver for geo-location of profile and time synchronisation
- Rechargeable Lithium-ion Battery

DATA SHEET

Product Details



MULTI-PARAMETER
CTD



SOUND
SPEED



OPTICAL



OCEAN & CONNECT
PATHWAY EDITION
SOFTWARE



USB



Rechargeable
Battery



GNSS

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Sensor Specification

Rhodamine*

Excitation	520 nm
Detection	650 nm
Dynamic Range	0-1,000 ppb 2 gain settings: 0-50, 0-1,000 software controlled
Minimum Detection (3x SD in RO water)	<0.01 ppb
Linearity	0.99 R ²
Response Time	0.03 - 2 sec
Output Rate	0.5 Hz - 32 Hz (free running) software controlled

Conductivity#

Range	0 - 80 mS/cm
Resolution	0.001 mS/cm
Accuracy	±0.05 mS/cm

Temperature (Platinum Resistance Thermometer)

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

Pressure (Temperature compensated piezo-resistive pressure transducer)

Range	50 Bar
Resolution	0.001% FS
Accuracy	±0.01% FS

Sound Velocity (Digital time of flight sensor)

Range	1375 – 1900 m/s
Resolution	0.001 m/s
Accuracy	±0.02 m/s

Salinity#

Range	0 - 42 PSU
Resolution	0.001 PSU
Accuracy	±0.05 PSU

Density#

Range	990 - 1035 kg/m ³
Resolution	0.001 kg/m ³
Accuracy	±0.05 kg/m ³

*Calibrated against Fluorescein/Rhodamine solution.
#Calculated Accuracies. Calculations based on Valeport's proprietary DASH formula.

Physical dimensions

Materials	Housing: Titanium Sinker weight: Stainless steel Optical window: Sapphire glass
Depth rating	500 m
Dimensions	Ø78 mm x Length 307 mm (with sinker weight)
Weight	2.7 kg (in air) / 1.7 kg (in water) including optional sinker weight

Communications (set-up and data offload)

USB Serial	
Bluetooth v4	Low energy

Electrical

Battery	SWIFT Battery endurance depends on the sampling scenario used – contact Valeport for more information. 100 days endurance 2 profiles per day to 100 m* 42 days - 3 profiles a day to 500 m* 2 days continuous running (normal power mode) (*Utilising Bluetooth Sleep mode)
Charging	USB - Supplied mains AC adapter

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-FR	SWIFT SVPplus profiler with Rhodamine sensor 500 m rated
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Supplied with	PC Bluetooth adapter USB interface and charging cable 1.5 A charger Valeport Ocean software Operating manual System transit case
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