SWiFT SVPplus
Fluorescein

Multi-parameter profiler

Valeport's SWiFT SVPplus Multi-Parameter Profiler with a Fluorescein sensor combines survey-grade sound speed, temperature and pressure sensor technology with Fluorometer observations.
The package is completed with the convenience of **Bluetooth®** connectivity, 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
  - Fluorescein sensor
- Bluetooth and USB connectivity
- Integral GNSS receiver for geo-location of profile and time synchronisation
- Rechargeable Lithium-ion Battery
- Dedicated PC software and iOS or Android App

Valeport's Hyperion Fluorometer sensor range, when combined with SWiFT, delivers high performance measurements of Fluorescein in a compact & robust package.

DATA SHEET

Product Details

MULTI-PARAMETER CTD

SOUND SPEED

OPTICAL

OCEAN & CONNECT PATH-WAY EDITION SOFTWARE

Bluetooth® USB Rechargeable Battery GNSS

Valeport Limited
St. Peters Quay, Totnes,
Devon TQ9 5EW United Kingdom

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

VALEPORT

Valeport's Hyperion Fluorometer sensor range, when combined with SWiFT, delivers high performance measurements of Fluorescein in a compact & robust package.

Sensor Specification

Flourescein*

Excitation	470 nm
Detection	545 nm
Dynamic Range	0-500 ppb 2 gain settings: 0-25, 0-500 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	500m
Dimensions	Ø78mm x Length 307mm (with sinker weight)
Weight	2.7kg (in air) / 1.7kg (in water) including optional sinker weight

Communications (set-up and data offload)

Bluetooth v4 - low energy

USB Serial

Electrical

Battery	Internal rechargeable Li-ion battery pack
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-FF	SWiFT SVPplus profiler with Fluorescein sensor 500m rated
Supplied with	PC Bluetooth adapter USB interface and charging cable 1.5 A charger Valeport Ocean software Operating manual System transit case

Datasheet Reference: SWiFT SVPplus Fluorescein | February 2023