



SWiFTplus Chlorophyll a

Multi-parameter profiler

Valeport's SWiFTplus Multi-Parameter Profiler with a Chlorophyll a 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 GPS module to geo-locate each profile.

- Multi-parameter profiler
 - CTD, Sound Speed, Salinity, Density
 - Up to 32Hz sampling rate
 - Chlorophyll a sensor
- Bluetooth and USB connectivity
- Integral GPS receiver for geo-location of profile and time synchronisation
- Rechargeable Lithium-ion Battery
- Dedicated PC software and iOS portable device App

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

DATA SHEET

Product Details



MULTI-PARAMETER CTD



SOUND SPEED



OPTICAL



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 Specification

Chlorophyll a*

Excitation	470 nm
Detection	696 nm
Dynamic Range	0-800 µg/l 2 gain settings: 0-40, 0-800 software controlled
Minimum Detection (3x SD in RO water)	0.025 µg/l
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° - +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 Chlorophyll a in acetone solution
#Calculated Accuracies. Calculations based on Valeport's proprietary DASH formula.

Physical dimensions

Materials	Housing: Titanium Sinkers 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

- Connect iOS for Bluetooth compatible mobile devices:
 - instrument set-up, data offload and data display
- Connect PC for both USB and Bluetooth connectivity:
 - instrument set-up, data offload and data display
- Both will export data in common file formats that are compatible with industry standard Hydrographic software packages
- Android App to follow

Ordering

0660047-50-FC SWiFTplus profiler with Chlorophyll a sensor - 500m rated

- Supplied with:
- Deployment weight
 - PC Bluetooth adapter
 - USB interface and charging cable and charger
 - Valeport Connect PC software \ iOS App
 - Transit Case



Datasheet Reference: SWiFTplus Chlorophyll a | April 2020

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