Hyperion
Fluorescein

Valeport's Hyperion Fluorescein sensor delivers high performance measurements of Fluorescein (Uranine) in a compact & robust package ideal as a standalone sensor, for ROV and AUV integration or used as part of a multi-sensor array and data logger. Hyperion is compatible with Valeport's EnviroLog and EnviroLog 4G systems.

Offered as standard in a 6,000m depth rated, titanium housing the Hyperion Fluorometer has a wide range (9-28V DC) isolated power supply, data output up to 16Hz and RS232, RS485 and Modbus RTU communication protocols. Hyperion offers an industry leading dynamic range with no adjustment of gain settings required.

Hyperion Fluorometers can be supplied with sensor guards and a shaped anti-snag connector cover. If required a more robust Kevlar weave protected cable can be supplied.

DATA SHEET

Product Details

OPTICAL

VALEPORT CONFIGURE SOFTWARE

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Sensor Specification

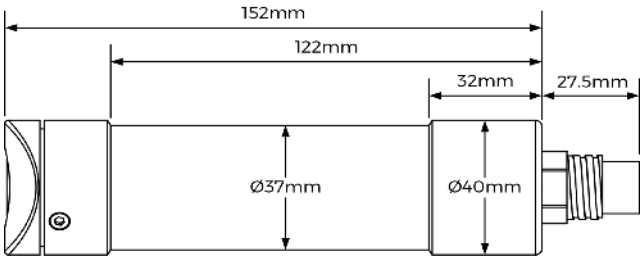
	Fluorescein*
Excitation	470 nm
Detection	545 nm
Dynamic Range	0-500 ppb
Minimum Detection (3x SD in RO water)	0.01 ppb
Linearity	0.99 R^2
Response Time	0.03 - 2 sec
Output Rate	0.5 Hz to 16 Hz (free running) software controlled

* Calibrated against Fluorescein solutions of varying concentrations

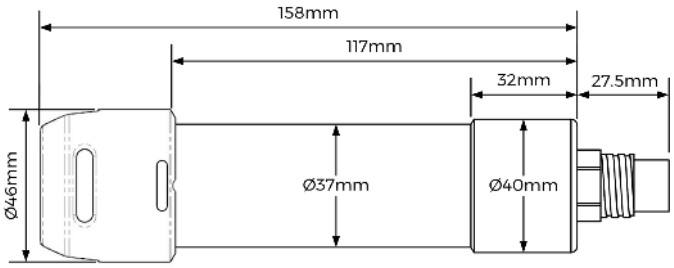
Physical

Materials	Titanium with glass window
Depth Rating	6,000m
Dimensions	40mmØ x 179.5mm (including connector)
Weight	0.50 kg (in air) 0.26 kg (in water)
Operating Temperature	-5°C to 35°C (the sensor is damaged above 60°C)

Dimensions - Standard Hyperion



Dimensions - with optional Sensor Guard



Electrical

External	9 – 28V DC Isolated
Power	<600mW
Connector	SubConn MCBH6F

Communications

The instrument will operate in real time, with set up performed by direct communications with a PC before deployment.

RS232 | RS485	2400 - 230400 baud rate 8 data bits | 1 stop bit | No Parity | No Flow Control
USB	Supplied cable and converter (RS232 to USB)
RS485 Modbus RTU (standard)	19200 baud rate 8 data bits | 1 stop bit | Even Parity | No Flow Control

Software

Valeport Configure software is supplied. Windows 10 software for instrument setup.

Ordering

0901001 - F	Hyperion Fluorescein (Uranine) instrument
	Supplied with: • Y lead • Manual and transit case • Valeport Configure Software
0901EA2	Hyperion to EnviroLog System interface cable various lengths available
0901251	Sensor Guard

Datasheet Reference: Hyperion Fluorescein | October 2023

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