



# Hyperion Rhodamine

Valeport's Hyperion Rhodamine sensor delivers high performance measurements of Rhodamine 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.

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 in a more rugged form that includes Acetal protection rings, a shaped anti-s snag connector cover and a Kevlar weave protected cable.

## DATA SHEET

### Product Details



OPTICAL



VALEPORT CONFIGURE  
SOFTWARE

## Sensor Specification

Rhodamine\*

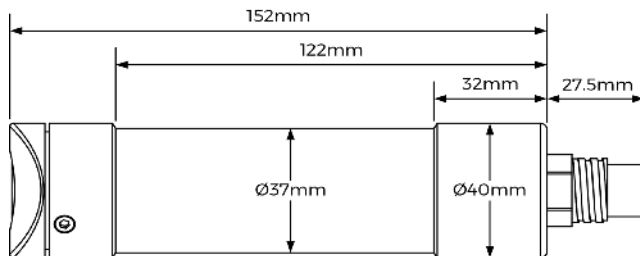
<b>Excitation</b>	520 nm
<b>Detection</b>	650 nm
<b>Dynamic Range</b>	0-1 000 ppb
<b>Minimum Detection (3x SD in RO water)</b>	0.01 ppb
<b>Linearity</b>	0.99 R <sup>2</sup>
<b>Response Time</b>	0.03 - 2 sec
<b>Output Rate</b>	0.5 Hz to 16 Hz (free running) software controlled

\* Calibrated against Rhodamine WT solution of varying concentrations

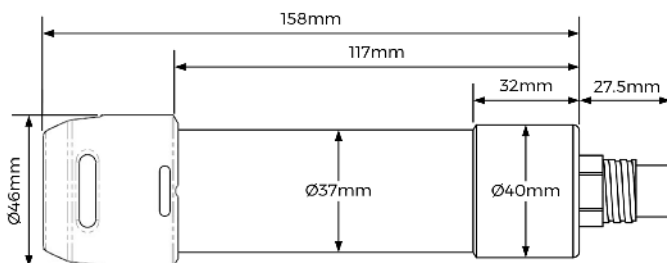
## Physical

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

## Dimensions - Standard Hyperion



## Dimensions - with optional Sensor Guard



## Electrical

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

## Communications

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

<b>RS232   RS485</b>	2400 - 230400 baud rate 8 data bits   1 stop bit   No Parity   No Flow Control <b>USB:</b> supplied cable and converter (RS232 to USB)
<b>RS485 Modbus RTU (standard)</b>	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

<b>0901001 - R</b>	Hyperion Fluorescein (Uranine) instrument
	Supplied with: <ul style="list-style-type: none"> <li>• Y lead</li> <li>• Manual and transit case</li> <li>• Valeport Configure Software</li> </ul>
<b>0901EA2</b>	Hyperion to EnviroLog System interface cable various lengths available
<b>0901251</b>	Sensor Guard

## Datasheet Reference: Hyperion Rhodamine | October 2023

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