



# Hyperion

## Phycocyanin Fluorometer

(Cyanobacteria | Freshwater Blue-Green Algae)

Valeport's Hyperion Fluorometer sensor delivers high-performance measurements of Phycocyanin in a compact and robust package ideal as a standalone sensor for ROV and AUV integration or used with 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 with ASCII and Modbus communication protocols.

Hyperion offers an industry leading dynamic range with no adjustment of gain settings required. The detection range for the Phycocyanin Fluorometer is from 0 to 9,000 ppm.

Hyperion Fluorometers can be supplied in a more rugged form that includes acetal protection rings, a shaped anti-snag connector cover and a kevlar weave protected cable for operation in borehole applications.

## DATA SHEET

### Product Details



OPTICAL



DATALOG X2  
& ENVIROLOG  
SOFTWARE

**Valeport Limited**  
St. Peter's Quay, Totnes,  
Devon TQ9 5EW United Kingdom

Telephone: +44 (0) 1803 869292  
Email: [sales@valeport.co.uk](mailto:sales@valeport.co.uk)  
[www.valeport.co.uk](http://www.valeport.co.uk)



Sensor Specification	
<b>Phycocyanin*</b>	
<b>Excitation</b>	590 nm
<b>Detection</b>	650 nm
<b>Dynamic Range:</b>	0-9 000 ppb
<b>Minimum Detection (3x SD in RO water)</b>	0.08 ppb
<b>Linearity</b>	0.99 R2
<b>Response Time</b>	0.03 - 2 sec
<b>Output Rate</b>	0.5 Hz - 16 Hz (free running) software controlled

\* Calibrated against Phycocyanin in water\Phosphate buffer solution.

Communications	
The instrument will operate in real time, with set up performed by direct communications with a PC before and after deployment.	
<b>RS232/RS485/ Modbus RTU</b>	Up to 200m cable Direct to serial port via USB adapter
<b>Baud Rate</b>	2400 - 115200
<b>Protocol</b>	8 data bits, 1 stop bit, No parity, No flow control

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

Software	
Valeport supply DataLog X2 Windows software for instrument setup, data download and display	

Physical	
----------	--

<b>Materials</b>	Titanium with Sapphire 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 Temp</b>	-5°C - 35°C (the sensor is damaged above 60°C)

Ordering	
<b>0901001 - PC</b>	Phycocyanin
Supplied with: · 1x Hyperion Instrument · 1x 0.5m pig tail · Manual and transit case · DataLog X2 Software	

## Datasheet Reference: Hyperion Fluorometer | April 2020

As part of our policy of continuing development, Valeport Ltd. reserve the right to alter at any time, without notice, all prices, specifications, designs and conditions of sale of all equipment - Valeport Ltd © 2020

