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.

Product Details

OPTICAL

DATALOG X2 & ENVIROLOG SOFTWARE

Sensor Specification

Phycocyanin*

Excitation	590 nm
Detection	650 nm
Dynamic Range:	0-9 000 ppb
Minimum Detection **(3x SD in RO water)**	0.08 ppb
Linearity	0.99 R2
Response Time	0.03 - 2 sec
Output Rate	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.

RS232 / RS485 / Modbus RTU	Up to 200m cable Direct to serial port via USB adapter
Baud Rate	2400 - 115200
Protocol	8 data bits, 1 stop bit, No parity, No flow control

Electrical

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

Software

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

Physical

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

Ordering

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

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