Hyperion
Fluorescein

Valeport's Hyperion Fluorometer sensor range delivers high performance measurements of Chlorophyll a, Phycocyanin, Fluorescein (Uranine), or Rhodamine in a compact & 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 6000m 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 communications.

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.

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 R2
Response Time	0.03 - 2 sec
Output Rate	0.5 Hz - 16 Hz (free running) software controlled

* Calibrated against Fluorescein\Rhodamine 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 - F	Fluorescein (Uranine)

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