



# **HYPERION Fluorometer**



Valeport's Hyperion Fluorometer sensor range delivers high performance measurements of Chlorophyll a, Fluorescein and 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 (9-30V DC) isolated power supply, data output up to 32Hz and RS232 communications.



Data Example - Chlorophyll a

Performance	Chlorophyll a	Fluorescein	Rhodamine
Excitation:	470 nm	470 nm	520 nm
Detection:	696 nm	545 nm	650 nm
Dynamic Range:	0-800 μg/l 2 gain settings: 0-40, 0-800 software controlled	0-500 ppb 2 gain settings: 0-25, 0-500 software controlled	0-1000 ppb 2 gain settings, 0-50, 0-1000 software controlled
Instrument Detection limit:	0.025 μg/l*	<0.01 ppb*	<0.01 ppb*
Operational Detection limit:	0.025 μg/l**	0.03 ppb***	0.06 ppb***
Linearity:	0.99 R <sup>2</sup>	0.99 R <sup>2</sup>	0.99 R <sup>2</sup>
Response Time:	0.03 to 2 sec	0.03 to 2 sec	0.03 to 2 s
Output Rate:	0.5 Hz to 32 Hz (free running) software controlled	0.5 Hz to 32 Hz (free running) software controlled	0.5 Hz to 32 Hz (free running) software controlled

<sup>\* 3</sup>x SD in RO water

# Temperature °C Temperature °C Chlorophyll a count Max count just below thermocline at 25-30m 12 13 14 100,000 200,000 300,000

### Communications

The instrument will operate in real time, with setup performed by direct communications with PC before and

after deployment RS232:

Up to 200m cable

Direct to serial port via USB adaptor

**Baud Rate:** 2400 - 115200

**Protocol:** 8 data bits, 1 stop bit, No parity,

No flow control

**Electrical** 

**External:** 9 – 30V DC Isolated

Power: <600mW

Connector: SubConn MCBH6F

**Physical** 

Materials: Titanium with Glass optics

**Depth Rating:** 6000m

**Dimensions:** 40mmØ x 179.5mm (including connector)

Weight 0.50 kg (in air)

0.26 kg (in water)

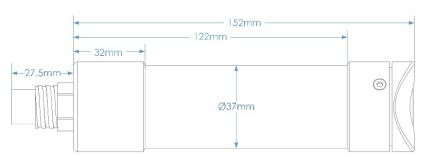
Operating Temp: 60°C

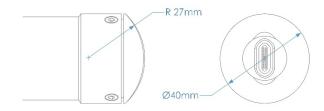
### Software

Valeport supply DataLog x2 Windows software for instrument setup, data download and display.

## **Ordering**

0901001-C for a Chlorophyll sensing Hyperion 0901001-F for a Fluorescein sensing Hyperion 0901001-R for a Rhodamine sensing Hyperion





### **Shipping Details**

In the box:

1x Hyperion Instrument
1x 0.5m pig tail
Terminal x2 and Manual

As part of our policy of continuing development, we reserve the right to alter at any time, without notice, all specifications, designs, prices and conditions of supply of all equipment

<sup>\*\*</sup> calibrated against Chlorophyll a in acetone solution

<sup>\*\*</sup>Calibrated against Fluorescein\Rhodamine solution