



HYPERION Fluorometer



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



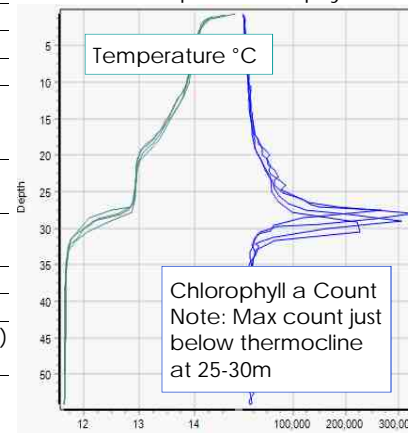
Performance	Chlorophyll a	Fluorescein	Rhodamine
Excitation:	470 nm	470 nm	520 nm
Detection:	696 nm	545 nm	650 nm
Dynamic Range:	0-800 µg/l 2 gain settings: 0-40, 0-800 software controlled	0-500 ppb 2 gain settings: 0-25, 0-500 software controlled	0-1000 ppb 2 gain settings: 0-50, 0-1000 software controlled
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 ²	0.99 R ²	0.99 R ²
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

* 3x SD in RO water

** Calibrated against Chlorophyll a in acetone solution

*** Calibrated against Fluorescein/Rhodamine solution

Data Example – Chlorophyll a



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

Software

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

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:	-2°C to 40°C (the sensor is damaged above 60°C)

Ordering

0901001 - C	for a Chlorophyll sensing Hyperion
0901001 - F	for a Fluorescein sensing Hyperion
0901001 - R	for a Rhodamine sensing Hyperion
Supplied with:	
• 1x Hyperion Instrument	
• 1x 0.5m pig tail	
• Manual and transit case	
• DataLog x2 Software	

