



# Hyperion Chlorophyll a

Valeport's Hyperion Fluorometer sensor delivers high performance measurements of Chlorophyll a, 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.

## DATA SHEET

### **Product Details**





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#### **Sensor Specification**

| Chlorophyll a*                           |  |
|--|--|
| Excitation                               | 470 nm   |
| Detection                                | 696 nm   |
| Dynamic Range:                           | 0-800 µg/l   |
| Minimum Detection<br>(3x SD in RO water) | 0.025 µg/l   |
| Linearity                                | 0.99 R2  |
| Response Time                            | 0.03 - 2 sec   |
| Output Rate                              | 0.5 Hz to 16 Hz<br>(free running)<br>software controlled |

| 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<br>(the sensor is damaged above 60°C) |  |

Ordering

0901001 - C

Supplied with: 1x Hyperion Instrument 1x 0.5m pig tail

Chlorophyll a

• Manual and transit case • DataLog X2 Software

\* Calibrated against Chlorophyll a in acetone 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 /<br>Modbus RTU | Up to 200m cable<br>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

#### Datasheet Reference: Hyperion Chlorophyll a | April 2020

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