



HyperionChlorophyll a

Teledyne Valeport's Hyperion Chlorophyll a 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 as part of a multi-sensor array and data logger.

Offered as standard in a 6,000 m depth rated, titanium housing the Hyperion Fluorometer has a wide range (9-28 V DC) isolated power supply, data output up to 16 Hz and RS232, RS485 and Modbus RTU communication protocols. Hyperion offers an industry leading dynamic range with no adjustment of gain settings required.

Hyperion Fluorometers can be supplied with a sensor guard to protect the optical window from physical damage and a Kevlar weave protected cable.

DATA SHEET

Product Details



OPTICA



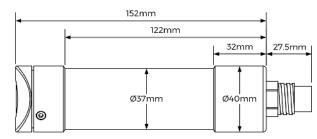


Sensor Specification Chlorophyll a*	
Excitation	470 nm
Detection	696 nm
Dynamic Range	0-800 μg/l
Minimum Detection (3x SD in RO water)	0.025 μg/l
Linearity	0.99 R ²
Response Time	0.03 - 2 sec
Output Rate	0.5 Hz to 16 Hz (free running) software controlled

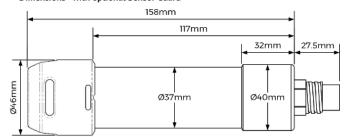
^{*} Calibrated against Chlorophyll a in acetone solution

Physical	
Materials	Titanium with glass window
Depth Rating	6,000 m
Dimensions	Ø40 mm x 179.5 mm (including connector)
Weight	0.50 kg (in air) 0.26 kg (in water)
Operating Temperature	-5°C to 35°C (the sensor is damaged above 60°C)

Dimensions - Standard Hyperion



Dimensions - with optional Sensor Guard



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

Communications

The instrument will operate in real time, with set up performed by direct communications with a PC before deployment.

RS232 RS485	2400 - 230400 baud rate 8 data bits 1 stop bit No Parity No Flow Control
USB	Supplied cable and converter (RS232 to USB)
Modbus RTU (standard)	19200 baud rate 8 data bits 1 stop bit Even Parity No Flow Control

Software

System is supplied with Configure Windows based PC software for instrument set up.

Ordering	
0901009-F1	Hyperion Chlorophyll a instrument
	Supplied with: • Y lead • Manual and transit case • Configure Software
0901EA2	Hyperion to EnviroLog System interface cable (various lengths available)
0901251	Sensor Guard

