



# Hyperion fDOM

Teledyne Valeport's Hyperion fDOM (fluorescent dissolved organic material) sensor delivers high performance measurements of DOM 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. Measurements of fDOM help to understand the health of all aquatic habitats, including coral reefs and marine benthic communities.

Offered as standard in a 6000 m depth rated, titanium housing, the Hyperion Fluorometer has a wide range (9-28 V DC) isolated power supply with data output up to 32 Hz via RS232, RS485 or Modbus communications.

Hyperion Fluorometers can be supplied with sensor guards and a shaped anti-snag connector cover. If required, a more robust Kevlar weave protected cable can be supplied.

## DATA SHEET

### Product Details



OPTICAL



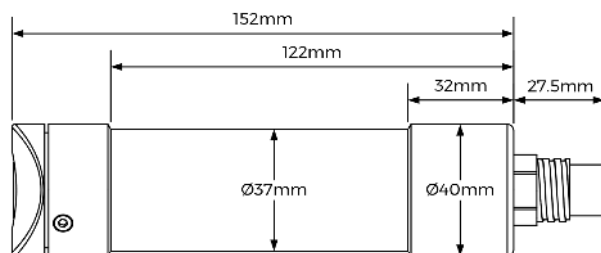
CONFIGURE  
SOFTWARE

Sensor Specification fDOM	
Excitation	365 nm
Detection	475 nm
Dynamic Range	0 - 4000 ppb PTSA
Minimum Detection (3x SD in RO water)	0.5 ppb
Linearity	0.99 R <sup>2</sup>
Response Time	0.03 - 2 sec
Output Rate	Up 0.5 Hx to 32 Hz

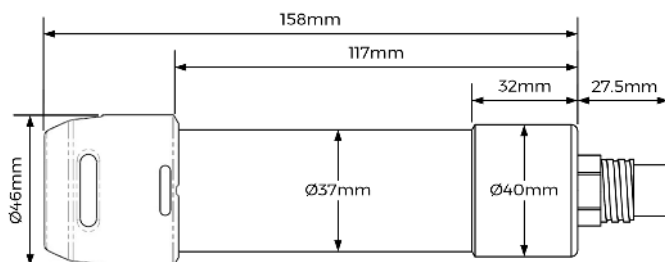
\* Calibrated against PTSA standard solution

Physical	
Materials	Titanium with Sapphire 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 up to 200 m cable	2400 - 115200 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

DataLog X2 / Configure software for instrument setup.

#### Ordering

0901009-F5	Hyperion fDOM instrument
	Supplied with: <ul style="list-style-type: none"> <li>• Y lead</li> <li>• Manual and transit case</li> <li>• Configure Software</li> </ul>
0901EA2	Hyperion to EnviroLog System interface cable (various lengths available)
0901251	Hyperion Sensor Guard Set

#### Datasheet Reference: Hyperion fDOM | December 2024

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