



EnviroLog

Logging, Display and Battery Module for Environmental Monitoring

EnviroLog is a standalone environmental hub that incorporates all that you require for a survey operation - command and control of your sensors, data display, data logging and battery power in a small robust package.

Multiple devices can be interfaced to EnviroLog where a user definable observation scenario can be programmed to control those devices as a group.

EnviroLog is optimised for Valeport's Hyperion range of optical sensors

- Fluorometers:
Chlorophyll a, Fluorescein, Sulforhodamine B, Rhodamine, Phycocyanin
- Turbidity

EnviroLog will automatically recognise the type of sensor interfaced and suitable header and units fields can be populated.

A 7.2 or 14Ah battery can be fitted to supply power for all three sensors. The data is stored internally and can be recovered either over Bluetooth or through the serial comms\charging port.

Markets

- Environmental monitoring
- Surface Water and Wastewater
- Utilities
- Industrial
- Coastal monitoring

DATA SHEET

Product Details



HYDROMETRY



ENVIRONMENTAL



ENVIROLOG
SOFTWARE

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Available Optical Instruments for EnviroLog

Fluorometer	Excitation	Detection	Dynamic Range	Minimum Detection
Chlorophyll a ^{note 1}	470 nm	696 nm	0-800 ug/l	0.025 ug/l
Phycocyanin ^{note 2} (Fresh Water Blue Green Algae)	590 nm	650 nm	0-9000 ppb	2 ppb
Fluorescein ^{note 3} (Uranine)	470 nm	545 nm	0 – 500 ppb	0.01 ppb
Sulforhodamine B ^{note 4}	520 nm	650 nm	0 - 1000 ppb	0.03ppb
Rhodamine ^{note 5}	520 nm	650 nm	0 – 1000 ppb	0.01 ppb

^{note 1} Calibrated against Chlorophyll a in acetone solution | ^{note 2} Calibrated against Phycocyanin in water \ Phosphate buffer solution

^{note 3} Calibrated against Fluorescein solution | ^{note 4} Calibrated against Sulforhodamine B solution | ^{note 5} Calibrated against Rhodamine WT solution

	Excitation\Detection	Linear Range		Minimum Detection
		Nephelometer	Optical Backscatter	
Turbidity	850 nm	0 to 1,000 linear response	0 to 6,000 linear response	0.03 NTU

(>6,000 NTU has a non-linear monotonic response that allows derivation of higher values using look-up tables)

Linearity measured to better than 0.99 R²

Comms

PC Setup & Data Download	RS232 \ USB
Instrument	RS485 Modbus RTU

Memory

Internal SD Card with more than sufficient capacity

Power

Can run from internal batteries and/or external DC supply:

- Rechargeable Lead Acid DC battery pack (1 pack 7.2 or 14Ahr)
- External 10 - 28VDC (not internally isolated)
- Automatically switches to the highest voltage supply

Internal Battery Life Indication:

12Ah battery (no use of display or Bluetooth)

- 1x Hyperion sensor
- 1x observation every 5 minutes

expected battery life: ~ 180 days

- 3x Hyperion sensors
- 1x observation every 10 minutes (all 3 instruments)

expected battery life: ~ 140 days

Set Up

Observation periods from 15 seconds to 24 hours.
Delayed start to a specific date and time

Physical

- Case**
- Adapted Peli 1200
 - Corrosion, Crush, Dust and Weather proof
 - 4x Souriau Connectors
 - Lead Acid battery module (up to 14Ahr)
 - Alpha Numeric data screen controlled by a single push button
 - Pressure relief valve

Size 260mm x 245mm x 125mm

Weight Total weight does not exceed 6kg with a 12Ah battery

Temperature -5°C to +35°C

Connectors

- Souriau Connectors** 3x instrument connectors
1x PC serial comms \ trickle charge

Software

The EnviroLog is configured with dedicated EnviroLOG software. The software allows you to configure the EnviroLog, not the instrument

EnviroLOG Software can identify the Hyperions interfaced to the EnviroLog System and program the observation schedule and start time and date

Valeport Configure should be used to set up the Hyperion instrument prior to interfacing to the EnviroLog

Both EnviroLOG Software and Valeport Configure software can be downloaded from the Valeport Water website and are licence free

Ordering

0901004 EnviroLog System

Supplied with:

- 12Ahr battery (option) and Charger
- PC Interface cable
- Software and manual
- 3 year warranty

0901EA2 • Hyperion to EnviroLog System interface cable various lengths available

Datasheet Reference: EnviroLog - Logging, Display and Battery Module | May 2022

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