

AP-LITE Data Sheet



AP-LITE Single Parameter

The AP-LITE is a simple probe with a single optical socket. This socket is able to house any of our optical electrodes, including turbidity and chlorophyll. A temperature sensor is also included on the probe. The AP-LITE package includes our rugged 3m cable, our GPS Aquameter, a range of accessories and a rugged carry case.

Build

All Aquaprobes are made with the same marine grade aluminium, finished in black with hard anodising for excellent corrosion and biofouling resistance. The use of metal, as opposed to plastic, gives our products their characteristic weight and high quality look and feel.

These sensors are designed and manufactured by Aquaread, to provide the best possible accuracy and performance, while remaining cost effective. The optical sensors can be easily removed by hand, making them easy to change when been used in the field. The AP-LITE offers sensor for the measurement of:

AP-LITE Key Features:

- IP67 handheld display
- Backlit display with ergonomic keypad
- 1110-point data memory
- GPS recording and site tag information
- Data export via USB to AquaLink utility
- User replaceable AA batteries
- Easy to follow calibration procedures

Optic

Optical Electrode Options:

Turbidity, Chlorophyll, Blue Green Algae, Rhodamine, Fluorescein, Refined Oil, CDOM / FDOM.

AP-LITE Package

As a package our AP-LITE comes supplied with everything you will need to start taking measurement. This includes our GPS Aquameter portable meter, offered with its rugged IP67 design, visual display and large on-board data logger for taking sport recordings, or data logging purposes. On-board GPS also allows you to record where measurement have been recorded and the water quality data.

Sensors

Our AP-LITE digital water quality sensor utilises the latest technology and allows you to connect any of our Aquaprobe optical water quality sensors.

AP-LITE Mechanical Specification

Protection Class	IP68 (permanent immersion)
Immersion Depth	Min 75mm. Max 100m**
Operating Temperature	-5°C-+70°C
Dimensions (L x Dia)	250mm x 24mm
Weight	400g

 $^{\star\,\star}$ 100m submersion for period of 12 hours, 30m submersion suitable for permanent deployment.



Screw in sensors make it easy to install the various sensors available

The AP-LITE is commonly used with our sapphire lensed turbidity sensor, chlorophyll sensor or blue-green algae sensors.

Whilst the package includes an Aquameter the AP-LITE can also be used with one of our AquaLoggers for unmanned turbidity, chlorophyll or blue-green algae monitoring.



AP-LITE

Logging Options

GPS Aquameter

The GPS Aquameter is a hand held device with a display for live data viewing and data recording. Data can be downloaded into our AquaLink, software. GPS coordinates are recorded everytime you take a reading and can be plotted in Google Earth. It is designed to be very simple to use and to make your job easier in the field.



AquaLogger-7000

The AquaLogger is a rugged data logger designed for short – medium periods of unmanned monitoring. It features a large 15,000 data set memory, houses a pressure sensor for barometric pressure measurement and it is powered by Lithium batteries.



AP-LITE Optical Sensor Specifications

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Chlor Phyce (freshwer) Phyce (marin Rhod WT Fluore D	Turbidity	Range	0 – 3000 NTU
		Resolution	2 Auto-range scales: 0.0 - 99.9 NTU, 100 - 3000 NTU
		Accuracy	± 5% of auto-ranged scale
	Chlorophyll	Range	0 – 500.0 µg/L (ppb)
		Resolution	2 Auto-range scales: 0.00 - 99.99 μg/L, 100.0 - 500.0 μg/L
		Repeatability	± 5% of reading
	Phycocyanin (freshwater BGA)	Range	0 - 300,000 cells/mL
		Resolution	1 cell/mL
		Repeatability	± 10% of reading
	Phycerythrin (marine BGA)	Range	200,000 cells/mL
		Resolution	1 cell/mL
		Repeatability	± 10% of reading
	Rhodamine WT Dye	Range	0 – 500 μg/L (ppb)
		Resolution	2 Auto-range scales: 0.00 - 99.99 μg/ L, 100.0 - 500.0 μg/ L
		Accuracy	± 5% of reading
	Fluorescein Dye	Range	0 – 500 μg/L (ppb)
		Resolution	2 Auto-range scales: 0.00 - 99.99 μg/L, 100.0 - 500.0 μg/L
		Accuracy	± 5% of reading
		Range	0 – 10,000 μg/L (ppb) (Napthalene)
	Refined Oil	Resolution	0.1 μg/L
		Repeatability	± 10% of reading
	CDOM / FDOM	Range	0 - 20,000 μg/L (ppb) (Quinine Sulphate)
		Resolution	2 Auto-range scales: 0.0 – 9,999.9 μg/L, 10,000 – 20,000 μg/L
		Repeatability	± 10% of reading

The accuracy figures quoted throughout this document represent the equipment's capability at the calibration points at 25°C. These figures do not take into account errors introduced by variations in the accuracy of calibration solutions and errors beyond the control of the manufacturer that may be introduced by environmental conditions in the field. Accuracy in the field is also dependent upon full calibration and minimal time between calibration and use.

