



# AquaLogger

The AquaLogger is a remote logging device designed to be left on-site for medium length deployments. The battery powered unit features a large built in memory and an LED indicator. Every AquaLogger comes complete with LoggerLink PC software and USB data cable so that you can set up your logging regime at your desk.

## Build

There are two types of Aqualogger available each designed to be used with specific probes:



### AquaLogger-2000:

for use with the AquaPlus, AP-LITE, AP-700, AP-800 and AP-2000 probes.

### AquaLogger-7000:

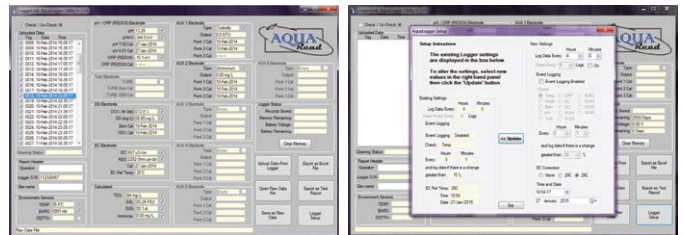
for use with the AP-5000, AP-6000 and AP-7000 Aquaprobes.

Each Aqualogger features an AquaConn connector to allow connection to the Aquaprobe and its extension cable.

The AquaLogger-2000 now utilises lithium batteries for extended life. The AquaLogger-7000 is used with standard C cell alkaline batteries.

## LoggerLink Features

- Simple data download
- Export data as a full report or save file to your PC
- Set up the logging regime and event triggers
- Upload settings back to the AquaLogger
- Check available memory and battery life



### Estimated battery life (same for both)

Logging Rate	Estimated battery life
Every Minute	2 Weeks
Every 5 Minutes	2.5 Months
Every 10 minutes	4 Months
Every 15 Minutes	6 Months
Every 30 minutes	1 Year
Every Hour	2 Years

### AquaLogger Mechanical Specification

Dimensions (L x Dia)	AquaLogger 2000: 44mm x 250mm AquaLogger 7000: 77mm x 250mm
Weight	AquaLogger 2000: 420g AquaLogger 7000: 1500g
Data Memory	15,000 full sets inc GLP data
Atmospheric Pressure	150mb - 1150mb Accuracy +/- 1mb
Interface	USB (cable provided)
Power Supply	AquaLogger 2000: 2x Lithium C cells AquaLogger 7000: 6x Lith C cells + 2x AAA cells
Battery Life	Dependent upon logging rate and temperature.
Operating Temperature	-20°C to +70°C
Protection Class	IP67

The AquaLogger can be used with Aquaprobes to measure the following parameters



Standard Parameters	Dissolved Oxygen	Range	0 – 500.0% / 0 – 50.00 mg/L
		Resolution	0.1% / 0.01mg/L
		Accuracy	0 - 200%: ± 1% of reading, 200% - 500%: ± 10%
	Depth AP-2000/ AP-5000	Range	± 0 – 60.00 m (60m max displayed depth, max probe immersion 100m)
		Resolution	1cm
		Accuracy	± 0.5% FS
	Depth AP-7000	Range	± 0 – 99.99 m
		Resolution	1cm
		Accuracy	± 0.2% FS
	Conductivity (EC)	Range	0 – 200 mS/cm (0 - 200,000 µS/cm)
		Resolution	3 Auto-range scales: 0 – 9999 µS/cm, 10.00 – 99.99 mS/cm, 100.0 – 200.0mS/cm
		Accuracy	± 1% of reading
TDS*	Range	0 – 100,000 mg/L (ppm)	
	Resolution	2 Auto-range scales: 0 – 9999mg/L, 10.00 – 100.00g/L	
	Accuracy	± 1% of reading	
Resistivity*	Range	5 Ω • cm – 1 MΩ • cm	
	Resolution	2 Auto-range scales: 5 – 9999 Ω • cm, 10.0 – 1000.0 KΩ • cm	
	Accuracy	± 1% of reading	
Salinity*	Range	0 – 70 PSU / 0 – 70.00 ppt (g/Kg)	
	Resolution	0.01 PSU / 0.01 ppt	
	Accuracy	± 1% of reading	
Seawater Specific Gravity*	Range	0 – 50 σt	
	Resolution	0.1 σt	
	Accuracy	± 1.0 σt	
pH	Range	0 – 14 pH / ± 625mV	
	Resolution	0.01 pH / ± 0.1mV	
	Accuracy	± 0.1 pH / ± 5mV	
ORP	Range	± 2000mV	
	Resolution	0.1mV	
	Accuracy	± 5mV	
Temperature (non freezing)	Range	-5°C – +50°C (23°F – 122°F)	
	Resolution	0.01°C / 0.1°F	
	Accuracy	± 0.1 °C	

\* Readings calculated from EC and temperature electrode values

ISE	Ammonium	Range	0 – 9,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 - 99.99 mg/L, 100.0 - 8,999.9 mg/L
		Accuracy	± 10% of reading or 2ppm (whichever is greater)
	Ammonia†	Range	0 – 9,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 - 99.99 mg/L, 100.0 - 8,999.9 mg/L
		Accuracy	± 10% of reading or 2ppm (whichever is greater)
	Chloride	Range	0 – 20,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 - 99.99 mg/L, 100.0 – 19,999.9 mg/L
		Accuracy	± 10% of reading or 2ppm (whichever is greater)
	Fluoride	Range	0 – 1,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 - 99.99 mg/L, 100.0 - 999.9 mg/L
		Accuracy	± 10% of reading or 2ppm (whichever is greater)
Nitrate	Range	0 – 30,000mg/L (ppm)	
	Resolution	2 Auto-range scales: 0.00 - 99.99 mg/L, 100.0 – 29,999.9 mg/L	
	Accuracy	± 10% of reading or 2ppm (whichever is greater)	
Calcium	Range	0 – 2,000mg/L (ppm)	
	Resolution	2 Auto-range scales: 0.00 - 99.99 mg/L, 100.0 – 1,999.9 mg/L	
	Accuracy	± 10% of reading or 2ppm (whichever is greater)	

† Ammonium electrode required. Readings calculated from ammonium, pH and temperature values.

Optical	Turbidity	Range	0 – 4000 NTU
		Resolution	2 Auto-range scales: 0.0 - 99.9 NTU, 100 - 4000 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	
Refined Oil	Range	0 – 10,000 µg/L (ppb) (Naphthalene)	
	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.