

The AP-700 and AP-800 packages represent the essentials in basic water quality monitoring. Offered as complete packages you are provided with everything you need to get testing water. Packages include an Aquaprobe, a GPS Aquameter, a 3 meter cable, accessories and some RapidCal calibration solution all housed in a neat carry case for easy storage and transport.

### **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. The AP-700 and AP-800 probes come with a pre-fitted 3m cable.



### Sensors

The AP-700 comes with all of the common water quality testing sensors pre fitted to the probe:

pH • ORP • Conductivity • TDS • SSG • Resistivity • Salinity • Dissolved Oxygen • Temperature

The AP-800 comes with an optical sensor port pre-fitted with a Turbidity sensor:

pH • ORP • Conductivity • TDS • SSG • Resistivity • Salinity • Dissolved Oxygen • Turbidity • Temperature

### **Galvanic DO**

Both the AP-700 and AP-800 feature our ruggedised galvanic DO sensor. This solid zinc electrode tip can easily be cleaned and is designed to last for many years.



## Upgrades available at time of order

Both the AP-700 and AP-800 can have the DO sensor upgraded to our optical dissolved oxygen sensor. Both probes can also have a depth sensor fitted at time of order.

### Exchange the Turbidity sensor?

As the turbidity sensor is mounted in one of our sensor ports you can exchange this sensor for any of our other optical sensors, at any time.

### Packages available



The AP-700 and AP-800 probes are available as complete packages. Included in the package is our GPS Aquameter, a bottle of Rapidcal, pH storage solution, batteries and other accessories.



### Extension cables

Our packages come complete with a 3m cable. If you need additional length we have 10m, 20m and 30m length options. Custom lengths are also available on request.



100m cable on a reel.

All cables 20m and over come on a winding reel making them much easier to operate, especially when profiling.

### **GPS** Aquameter

The GPS Aquameter is a hand held device with a display for live data viewing and data recording. As one of our flagship products it is included in every Aquaprobe package. It is designed to be very simple to use and to make your job easier in the field.



All currently measured data can be recorded by pressing the M+ button, as you record your dataset

the Aquameter uses its built in GPS receiver to record the precise location that the measurements were taken from, with data being viewable in Google Earth.





GPS data sets viewed in Google Maps and Google Earth

### AquaLink

Our AquaLink software is free to download from our website's download section. Use this software to download recorded data from your Aquameter, for analysis, reporting and google map creation.

### AquaLink Features

- Simple data download via button
- Tick and un-tick datasets to customise your outputs
- Output a text report for all highlighted data
- Output data as a CSV file that you can open in Excel
- Output data as a .KML file for use in Google Earth



AquaLink and Google Earth screen shots



### **Specifications**

Protection Class	IP68 (permanent immersion)
Immersion Depth	Min 75mm. Max 50m*
Operating Temperature	-5°C-+70°C
Dimensions (L x Dia)	290mm x 42mm
Weight	700g

<sup>\*50</sup>m submersion for period of 12 hours, 10m submersion suitable for permanent deployment.

# **Aquaprobe Specifications**



# 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	Range	± 0 - 60.00 m (60m max displayed depth, max probe immersion 100m)
AP-2000/ AP-5000	Resolution	1cm
	Accuracy	± 0.5% FS
Depth	Range	± 0 - 99.99 m
AP-7000	Resolution	1cm
	Accuracy	± 0.2% FS
Conductivity	Range	0 - 200 mS/cm (0 - 200,000 μS/cm)
(EC)	Resolution	3 Auto-range scales: 0 – 9999 μS/cm, 10.00 – 99.99 mS/cm, 100.0 – 200.0mS/cm
()	Accuracy	± 1% of reading
	Range	0 – 100,000 mg/L (ppm)
TDS*	Resolution	2 Auto-range scales: 0 - 9999mg/L, 10.00 - 100.00g/L
	Accuracy	± 1% of reading
	Range	5 Ω • cm − 1 MΩ • cm
Resistivity*	Resolution	2 Auto-range scales: 5 - 9999 Ω • cm, 10.0 - 1000.0 KΩ • cm
	Accuracy	± 1% of reading
	Range	0 – 70 PSU / 0 – 70.00 ppt (g/Kg)
Salinity*	Resolution	0.01 PSU / 0.01 ppt
	Accuracy	± 1% of reading
Seawater	Range	0 - 50 ot
Specific Gravity*	Resolution	0.1 ot
	Accuracy	± 1.0 ot
рН	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℃ / 0.1℉
	Accuracy	± 0.5 ℃

<sup>\*</sup> Readings calculated from EC and temperature electrode values

	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 <sup>†</sup>	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
SE		Accuracy	± 10% of reading or 2ppm (whichever is greater)
נט	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)

<sup>†</sup> Ammonium electrode required. Readings calculated from ammonium, pH and temperature values.

# Optical

Turbidity	Hange	0 - 3000 NTO		
	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		
Dhyanayanin	Range	0 - 300,000 cells/mL		
Phycocyanin (freshwater BGA)	Resolution	1 cell/mL		
(ii osiiii door bori)	Repeatability	± 10% of reading		
Phycerythrin	Range	200,000 cells/mL		
(marine BGA)	Resolution	1 cell/mL		
,	Repeatability	± 10% of reading		
Rhodamine	Range	0 – 500 μg/L (ppb)		
WT Dye	Resolution	2 Auto-range scales: 0.00 - 99.99 μg/L, 100.0 - 500.0 μg/L		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Accuracy	± 5% of reading		
Fluorescein	Range	0 – 500 μg/L (ppb)		
Dye	Resolution	2 Auto-range scales: 0.00 - 99.99 μg/L, 100.0 - 500.0 μg/L		
Буе	Accuracy	± 5% of reading		
Refined Oil	Range	0 – 10,000 μg/L (ppb) (Napthalene)		
	Resolution	0.1 μg/L		
	Repeatability	± 10% of reading		
CDOM / FDOM	Range	0 – 20,000 μg/L (ppb) (Quinine Sulphate)		
		2 Auto-range scales: 0.0 – 9,999.9 μg/L, 10,000 – 20,000 μg/L		
	Repeatability	± 10% of reading		

0 = 3000 NTU

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.