



AP-700/800

Basic multiparameter water quality probe

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.

Optical DO
Aivable on Request

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.



AP-700 with sleeve removed

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.

AP-700 / AP-800

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

* 50m 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%: $\pm 1\%$ of reading, 200% - 500%: $\pm 10\%$
	Depth AP-2000/ AP-5000	Range	$\pm 0 - 60.00$ m (60m max displayed depth, max probe immersion 100m)
		Resolution	1cm
		Accuracy	$\pm 0.5\%$ FS
	Depth AP-7000	Range	$\pm 0 - 99.99$ m
		Resolution	1cm
		Accuracy	$\pm 0.2\%$ FS
	Conductivity (EC)	Range	0 - 200 mS/cm (0 - 200,000 μ S/cm)
		Resolution	3 Auto-range scales: 0 - 9999 μ S/cm, 10.00 - 99.99 mS/cm, 100.0 - 200.0mS/cm
		Accuracy	$\pm 1\%$ of reading
	TDS *	Range	0 - 100,000 mg/L (ppm)
		Resolution	2 Auto-range scales: 0 - 9999mg/L, 10.00 - 100.00g/L
		Accuracy	$\pm 1\%$ of reading
	Resistivity *	Range	5 $\Omega \cdot$ cm - 1 M $\Omega \cdot$ cm
		Resolution	2 Auto-range scales: 5 - 9999 $\Omega \cdot$ cm, 10.0 - 1000.0 K $\Omega \cdot$ cm
		Accuracy	$\pm 1\%$ of reading
	Salinity *	Range	0 - 70 PSU / 0 - 70.00 ppt (g/Kg)
		Resolution	0.01 PSU / 0.01 ppt
		Accuracy	$\pm 1\%$ of reading
	Seawater Specific Gravity *	Range	0 - 50 σ_t
		Resolution	0.1 σ_t
		Accuracy	$\pm 1.0 \sigma_t$
	pH	Range	0 - 14 pH / ± 625 mV
		Resolution	0.01 pH / ± 0.1 mV
		Accuracy	± 0.1 pH / ± 5 mV
	ORP	Range	± 2000 mV
		Resolution	0.1mV
		Accuracy	± 5 mV
	Temperature (non freezing)	Range	-5°C - +50°C (23°F - 122°F)
		Resolution	0.01°C / 0.1°F
		Accuracy	± 0.5 °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	$\pm 10\%$ 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	$\pm 10\%$ 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	$\pm 10\%$ 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	$\pm 10\%$ 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	$\pm 10\%$ 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	$\pm 10\%$ of reading or 2ppm (whichever is greater)

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

Optical	Turbidity	Range	0 - 3000 NTU
		Resolution	2 Auto-range scales: 0.0 - 99.9 NTU, 100 - 3000 NTU
		Accuracy	$\pm 5\%$ of auto-ranged scale
	Chlorophyll	Range	0 - 500.0 μ g/L (ppb)
		Resolution	2 Auto-range scales: 0.00 - 99.99 μ g/L, 100.0 - 500.0 μ g/L
		Repeatability	$\pm 5\%$ of reading
	Phycocyanin (freshwater BGA)	Range	0 - 300,000 cells/mL
		Resolution	1 cell/mL
		Repeatability	$\pm 10\%$ of reading
	Phycerythrin (marine BGA)	Range	200,000 cells/mL
		Resolution	1 cell/mL
		Repeatability	$\pm 10\%$ of reading
	Rhodamine WT Dye	Range	0 - 500 μ g/L (ppb)
		Resolution	2 Auto-range scales: 0.00 - 99.99 μ g/L, 100.0 - 500.0 μ g/L
		Accuracy	$\pm 5\%$ of reading
	Fluorescein Dye	Range	0 - 500 μ g/L (ppb)
		Resolution	2 Auto-range scales: 0.00 - 99.99 μ g/L, 100.0 - 500.0 μ g/L
		Accuracy	$\pm 5\%$ of reading
	Refined Oil	Range	0 - 10,000 μ g/L (ppb) (Napthalene)
		Resolution	0.1 μ g/L
		Repeatability	$\pm 10\%$ of reading
	CDOM / FDOM	Range	0 - 20,000 μ g/L (ppb) (Quinine Sulphate)
		Resolution	2 Auto-range scales: 0.0 - 9,999.9 μ g/L, 10,000 - 20,000 μ g/L
		Repeatability	$\pm 10\%$ 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.