Streamline Measurement Ltd

Aquaprobe Multiparameter Range

We offer an advanced range of multiparameter testing instruments and various data collection options to cover all aspects of water monitoring. We offer all of the below Aquaprobes as individual items or as part of a complete water monitoring package providing you with every thing you need to get monitoring in the field.

Multiparameter Water Quality

AP-700/AP-800 Packages

Entry-level multiparameter water quality monitoring packages available at unbeatable prices

Each of our multiparameter packages comes as a complete set, including the multiparameter Aquaprobe, a 3m rugged Kevlar re-inforced cable and our IP68 rated GPS Aquameter . All of the kit is provided in either our hard or rugged case for easy storage and safe transport. The package also includes a host of accessories such as a bottle of RapidCal calibration solution, a USB cable and PC application software for data management on your computer.

The Aquaprobes feature pH/ORP, Conductivity, Dissolved Oxygen (DO) and Temperature sensors, with the AP-800 also featuring a Turbidity sensor that utilises sapphire lenses for improved optical response. They also feature factory replaceable sensors and cable should anything ever go wrong.

AP-700 Package Parameters

- **pH/ORP**
- **4 ring Conductivity***
- **Dissolved Oxygen (galvanic)**
- **Temperature**

AP-800 Package Parameters

- **pH/ORP**
- **4 ring Conductivity***
- **Dissolved Oxygen (galvanic)**
- **Turbidity**
- **Temperature**

AP-700 /AP-800 Mechanical Specification

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

AP-700/800 both feature a newly designed rugged galvanic DO sensor tip. The solid zinc electrode is much more resistant to corrosion than earlier versions of the sensor.

*Additional parameters Salinity, TDS, SSG and Res are calculated from the EC and Temperature readings.
**50m submersion for period of 1 week, 10m submersion suitable for permanent deployment.

AP-LITE Package

Simple, single parameter monitoring with the versatile, portable AP-LITE system

Optical Sensors :

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

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. The package includes our rugged 3m cable, our GPS Aquameter, a range of accessories and a rugged carry case.

AP-LITE / AquaPlus 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

**100m submersion for period of 1 week, 30m submersion suitable for permanent deployment.

AquaPlus
Optical DO / EC / Temperature Package

The AquaPlus is a portable system for measuring dissolved oxygen using our advanced optical technology. Its built-in conductivity sensor facilitates salinity measurement which in turn allows automatic salinity compensation. The package includes a 3m cable, a GPS AquaPlus meter, the Oxilink PC application and a hard carry case.

Optical sensors offer significant advantages over galvanic based DO sensors:

- Oxygen is not consumed by the sensor so no flow of water is required
- Sensor holds calibration well and requires little maintenance
- Low maintenance cost with caps lasting over 2 years

AP-2000 Packages

Take your portable water quality monitoring to the next level by using the advanced AP-2000 multiparameter probe

Optical DO, Conductivity*, pH/ORP, Temperature, 2 customisable sensor ports and the option to add depth

The IP68 rated Aquaprobe is constructed of marine grade aluminium and is designed for use in fresh, marine and waste-water applications. Its metal construction and weight reflect the superior build quality of the instrument. Package comes complete with Aquaprobe, GPS Aquameter, 3m cable, rugged case and accessories.

AP-2000 Advantages:

- Probes come as standard with a fully calibrated, advanced optical DO sensor
- Extra sensor ports allow users to insert 1 ISE and 1 optical sensor or 2 ISE sensors
- Probes have a built in connector allowing quick and easy cable exchange, submersible to up to 100m**
- Probes are available with a built in depth sensor (AP-2000-D)

ISE Electrode Options:

Ammonium & Ammonia,
Chloride,
Nitrate,
Fluoride,
Calcium.

Optical Electrode Options:

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

AP-2000/2000-D Mechanical Specification

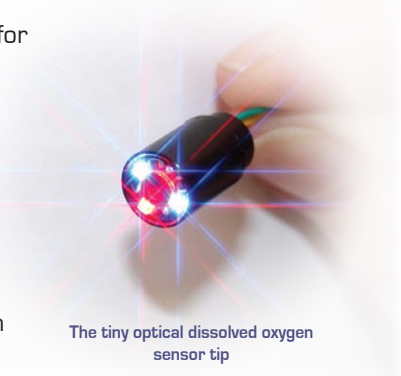
Protection Class	IP68 (permanent immersion)
Immersion Depth	Min 75mm. Max 100m**
Operating Temperature	-5˚C - +70˚C
Dimensions (L x Dia)	290mm x 42mm
Weight	700g

*Additional parameters Salinity, TDS, SSG and Res are calculated from the EC and Temperature readings.

**100m submersion for period of 1 week, 30m submersion suitable for permanent deployment, depth measurement up to 60m.

The AP-2000 features advanced optical DO technology offering some significant advantages

- No flow of water required for stable reading, making it ideal for deployment in still waters
- Reduced maintenance, holds calibration for up to 6 months and does not need cap and solution replacement
- Reduced membrane fouling optimises sensor for long term deployment



The tiny optical dissolved oxygen sensor tip

AP-5000 Package

Maximise your data collection using the portable AP-5000 package

Optical DO, Conductivity*, pH/ORP, Temperature Depth and 4 customisable sensor ports

The AP-5000 builds on the advances of the AP-2000 by offering even more user configurable sensor ports. Each auxiliary port on this probe is able to house either an ISE or an optical sensor, providing unique customisation options for a probe of its size and cost. Package comes complete with Aquaprobe, GPS Aquameter, 3m cable, rugged case and accessories.

"Using the AP-5000 system I can monitor standard parameters accurately and easily.

Most importantly, I can also look at a selection of more advanced parameters and change the sensor arrangement to suit my customer's monitoring requirements.

The rugged carry case is big enough to fit all my equipment in and my 10m cable fits into the large void. "

Sensors are easily fitted into the auxiliary sockets

AP-5000 Mechanical Specification

Protection Class	IP68 (permanent immersion)
Immersion Depth	Min 75mm. Max 100m**
Operating Temperature	-5˚C - +70˚C
Dimensions (L x Dia)	340mm x 55mm
Weight	950g

*Additional parameters Salinity, TDS, SSG and Res are calculated from the EC and Temperature readings.

**100m submersion for period of 1 week, 30m submersion suitable for permanent deployment, depth measurement up to 60m.

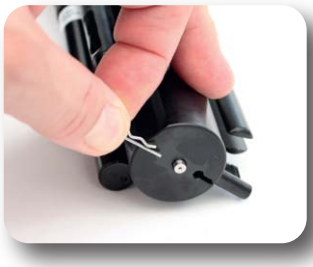
AP-7000 Package

The AP-7000 takes long term deployment to the next level. It features a novel dual wiper system to clean ALL electrodes. It comes with a standard set of sensors plus 6 Aux ports to house any combination of Aquaread ISE and Optical sensors.

Optical DO, Conductivity*, pH/ORP, Temperature Depth and 6 customisable sensor ports

The AP-7000 self clean system keeps your sensors clean for extended monitoring. Not only does it clean ALL connected sensors multiple times per cleaning cycle, it also cleans the brush before and after each clean. Package comes complete with Aquaprobe, GPS Aquameter, 3m cable and accessories.

Self-cleaning mechanism: easy to maintain and cost affective



Remove the pin to free the cleaning arm for easy maintenance such as brush cleaning or replacement.

Various Logging Options

The AP-7000 can be used with the GPS Aquameter for live readings and automatic recording for short periods. For longer periods of monitoring the AP-7000 can be used with our Data loggers for months at a time or it can be connected to our Neon data network via the BlackBox SDI-12 / Modbus data converter.

AP-7000 Mechanical Specification

Protection Class	IP68 (permanent immersion)
Immersion Depth	Min 75mm. MAX 100m‡
Operating Temperature	-5˚C - +70˚C
Dimensions (L x Dia)	440mm x 77mm
Weight	1350g

*Additional parameters Salinity, TDS, SSG and Res are calculated from the EC and Temperature readings.

‡100m submersion for period of 1 week, 30m submersion suitable for permanent deployment.

SPECIFICATION

Standard Parameter Specification

Optical 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%
New Rating Depth AP-2000/5000	Range	± 0 – 60.00m
	Resolution	1cm
	Accuracy	± 0.5% FS
New Rating Depth AP-7000	Range	± 0 – 99.99m
	Resolution	1cm
	Accuracy	± 0.2%
Conductivity (EC)	Range	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 or ± 1µS/cm if greater
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 or ± 1mg/L if greater
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 or ± 1 Ω•cm if greater
Salinity*	Range	0 – 70 PSU / 0 – 70.00 ppt (g/Kg)
	Resolution	0.01 PSU / 0.01 ppt
	Accuracy	± 1% of reading or ± 0.1 unit if greater
Seawater Specific Gravity*	Range	0 – 50 σ_t
	Resolution	0.1 σ_t
	Accuracy	± 1.0 σ_t
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
New Rating Temperature	Range	-5˚C – +70˚C
	Resolution	0.1˚ C/F
	Accuracy	± 0.5˚ C

* 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 – 9,000 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 – 9,000 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 – 20,000 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 – 1,000mg/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 – 30,000 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 – 2,000mg/L
	Accuracy	± 10% of reading or 2ppm (whichever is greater)

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

Turbidity	Range	0 – 3000 NTU
	Resolution	2 Auto-range scales: 0.0 99.9 NTU, 100 – 3000 NTU
	Accuracy	± 5% of auto ranged scale
New Rating Chlorophyll	Range	0 – 500 µg/L (ppb)
	Resolution	2 Auto-range scales: 0.00 - 99.99 µg/L, 100.0 - 500.0µg/L
	Repeatability	± 5% of reading
Phycocyanin (Freshwater Blue -Green Algae)	Range	0 – 300,000 cells/mL
	Resolution	1 cell/mL
	Repeatability	± 2% of reading
Phycoerythrin (Marine Blue-Green Algae)	Range	0 – 200,000 cells/mL
	Resolution	1 cell/mL
	Repeatability	± 2% of reading
New Rating Rhodamine WT Dye	Range	0 – 500 µg/L (ppb)
	Resolution	2 Auto-range scales: 0.00 - 99.99 µg/L, 100.0 - 500.0µg/L
	Accuracy	± 5% of reading
New Rating Fluorescein Dye	Range	0 – 500 µg/L (ppb)
	Resolution	2 Auto-range scales: 0.00 - 99.99 µg/L, 100.0 - 500.0µg/L
	Accuracy	± 5% of reading
Refined Oil	Range	0 – 10,000 µg/L (ppb) (Napthalene)
	Resolution	0.1 µg/L
	Repeatability	± 10% of reading
New Sensor CDOM / FDOM	Range	0-20,000µg/L (ppb) (Quinine Sulphate)
	Resolution	2 Auto-range scales: 0.0 - 9,999.9 µg/L 10,000 - 20,000µg/L
	Repeatability	±10% of reading