

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%
Depth AP-2000-D/5000	Range	0 – 60 m (AP-7000 0 - 99.99 m)
	Resolution	1 cm
	Accuracy	± 0.05% FS (AP-7000 ± 0.2%)
Conductivity (EC)	Range	0 – 200 mS/cm (0 - 200,000 µS/cm)
	Resolution	3 Auto-range scales: 0 – 9,999 µS/cm, 10.00 – 99.99 mS/cm, 100.0 – 200.0mS/cm
	Accuracy	± 1% of reading or ± 1 µS/cm if greater
TDS *	Range	0 – 100,000 mg/L (ppm)
	Resolution	2 Auto-range scales: 0 – 9,999mg/L, 10.00 – 100.00g/L
	Accuracy	± 1% of reading or ± 1mg/L if greater
Resistivity *	Range	50•cm – 1MΩ•cm
	Resolution	2 Auto-range scales: 5 – 9,999 Ω•cm, 10.0 – 1,000.0 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	± 0.01 pH / ± 5mV
ORP	Range	± 2,000mV
	Resolution	0.1mV
	Accuracy	± 5mV
Temperature	Range	-5°C – +70°C (23°F – 158°F)
	Resolution	0.01 °C / 0.1 °F
	Accuracy	± 0.5° C

* Readings calculated from EC and temperature electrode values

ISE Electrode specification

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

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

Optical electrode specification

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 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 (Fresh water 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
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) (Napthalene)
	Resolution	0.1 µg/L
	Repeatability	± 10% of reading
CDOM / FDOM (Coloured Dissolved Organic Matter / Fluorescent Diss. Organic Matter)	Range	0 - 20,000µg/ 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 above 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.

Long term monitoring made easy with the AP-7000’s effective self cleaning system

The best
priced
quality sensors
available



METER FEATURES

Rugged metal connectors that won't let you down in the field



- Built in GPS receiver enables location tagging with every dataset; view data in Google Earth.
- Display of all the parameters being measured; scroll left and right to view.
- Record your dataset at the touch of a single button, including all parameters, GPS data and calibration data.
- Built in air pressure sensor for atmospheric compensation.
- 3-point pH calibration set to 4.01, 7.00 and 10.00
- Ergonomic curved design sits nicely in the hand, with rubber gasket for added grip in wet conditions.
- Rugged, metal AquaConn connectors provide extreme durability where it's needed most.
- Supplied with AquaLink PC utility and USB cable for data management, report creation and Google Earth file generation.
- The meter can be used with various AquaProbes.

Mechanical Specification

Dimensions (W x H x D)	90 mm x 180 mm x 39 mm	Atmospheric Pressure	150 mb - 1150 mb +/-1 mb
Weight (incl. batteries)	450 g	PC interface	USB Cable (provided)
Display	80 character with backlight	Power Supply	5 x AA battery
Data Memory	Over 1000 full data sets	Operating Temperatures	-5°C - +50°C
GPS Receiver	12 channel, internal antenna	Protection Class	IP67

AP-7000 package

Art.no.: Description
1859 Multiparameter AP-7000 set, consisting of GPS Aquameter, AP-7000 probe DO (optical), EC, pH, Redox, Sal, TDS, depth, temperature and 6 ports for optional sensors (ISE or optical), with 3 meter cable, accessories and fluids.

AP-7000 PROBE

Record up to 17 water quality parameters over long periods of unmanned monitoring

Standard Parameters:

pH, EC, Salinity, Redox, Optical DO, TDS & Temperature.

6 Additional ports:

There are an additional 6 ports allowing you to add much more: All 6 Aux ports can be fitted with either an optical sensor or an ISE.

ISE Electrodes:

Ammonium & Ammonia
Calcium, Fluoride
Chloride, Nitrate

Optical Electrodes:

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

Mechanical Specification

Protection class	IP68 (perm. immersion)
Immersion depth	Min. 75 mm. Max. 100 m*
Operating temperature	-5°C ...+70°C
Dimensions (length x diam.)	440 mm x 77 mm
Weight	1350 g

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

Easy and cost effective to maintain

The self cleaning system on the AP-7000 cleans every sensor installed on the probe including pH and conductivity. Over time the brushes can become fouled particularly during long deployments so the wiper arm is designed to be easily removed for quick and simple brush replacement:

Top right: Remove the pin from the top of the cleaning arm

Right: Slide out the cleaning arm

Bottom right: slide out the brushes and quickly replace



Probe features



- Measure Turbidity, Optical DO, EC, pH, Redox, Depth, Temperature and ISE, at the same time
- Made from marine grade anodised aluminium to withstand all environments.
- Probe features the rugged, metal connectors for greater strength and protection.
- The probe can be used with a range of extension cable lengths. The cables are made to last on the outside and on the inside. All extension cables contain a KevlarCore; internal strands of Kevlar that run the length of the cable to provide extra tensile strength, meaning there is no need for messy external support cables.
- Large range of exchangeable electrodes available for use in the AP-7000 probe.
- The probe allows you to add 6 ISE electrode or optical electrode. You can choose from the large range of sensors available, swap and change as you please.

Various logging options

Next to the Aquameter that is included in the standard set, the AP-7000 probe can be used in combination with the GDT-Multiple or the AquaLogger-7000.

The probe fits seamlessly in the Smart Sensing concept of Eijkelkamp Soil & Water.



With the AquaProbe BlackBox you can connect your AquaProbe direct to your PC.