Water Quality Multiprobes

DO IT ONCE... no more pointless field trips!

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AQUA 75

Water Quality Multiprobe

> a qualab scientific

AQUA 50

Water Quality Multiprobe

aqualab

aqualab



Aqua Multiprobes

You've never seen this performance at this price in a water quality multiprobe. Our features speak for themselves!

Reliability:

Aqua multiprobes are so well suited for demanding field conditions that Eureka is the only manufacturer providing a three-year warranty that includes all sensors. Superior sensors mean you can trust your data.

Fitness for Purpose:

Eureka uses the best sensors available and materials that stand up to all field conditions. Eureka multiprobe construction and operation has been tested in thousands of demanding applications over several decades.

Lifetime Cost:

Not only does the Aqua multiprobe have a highly competitive purchase price, but it also has the lowest maintenance costs in the industry.

Service After Sale:

In the event that you run into a problem, Aqualab Customer Support responds immediately to emails and phone calls and does not rest until your problem is solved.

Ease of Use:

Aqua multiprobes are easy to calibrate and deploy. Our hallmark is software so simple you can walk yourself through in just a few minutes. You will not need a manual to learn the software features.

Warranty:

Industry leading three-year warranty.

The Aqua Multiprobes

The Aqua 50 includes a multiprobe with sensors for temperature, dissolved oxygen, conductivity, and pH/ORP in a 50mm diameter instrument; weighted sensor guard, tool and maintenance kit, and soft carrying case.

The Aqua 75 includes the same as Aqua 50 plus a turbidity sensor in a 75mm diameter instrument (and optional internal-logging battery pack).

Options:

Depth (level) sensors, USB adapter, 5, 10, 20, 30, 40, and 50m underwater cables, integrated SDI-12 and MODBUS output for connection to third-party devices, Aqua Mobile Bluetooth equipped tablet (Apple and Android) with rugged field enclosure, flow cell, copper anti-fouling kit, pipe kit, telemetry kit, and calibration solutions.

Application include:

- spot-checking
- remote telemetry
- water and wastewater
- education and research
- aquaculture
- unattended logging
- lakes, rivers, estuaries
- process control
- laboratory
- ground water



AQUA 50

AQUA 75



AQUA MINI

Accessories (Generic)

- Underwater cables 3 200 meters
- Battery pack for self-powered logging
- Aqua Mobile Bluetooth
- Soft and hard carry cases
- Flow cell
- Anti-fouling sensor guard



Aqua Mini is the most compact multiprobe!

The Aqua Mini incorporates the field-proven electronics of Eureka's premier Manta+ multiprobe, with a smaller, light-weight instrument body.

Select any one of the water quality sensors (excluding ISE's), and add temperature and/or depth (vented or non-vented) sensors. The Aqua Mini is an excellent choice when you need a self-powered probe for autonomous Turbidity logging. For example, choose wipered Turbidity with temperature and depth, or Turbidity and temperature sensors only.

Aqua Mini are also ideal for use in dye-trace studies, equipped with Rhodamine, Fluorescein, or other custom dye sensors. Use the Aqua Mini with the MantaLink app for iOS or Android, or Windows for the PC.

- Choose one a water quality sensor, plus add Temperature and/or Depth
- For spot checking, logging, or connection to data stations
- LED diagnostic status indicators
- Optional battery pack for long-life logging power
- Robust marine connector
- Small, rugged, light-weight design
- Compatible with Aqua Mobile and Manta Link apps, Windows, iOS and Android
- Excellent choice for autonomous Turbidity logging

About Eureka

Eureka has designed and manufactured top-shelf, water-quality monitoring instruments since 2002. We were the first to offer LED operation indicators, calibration logs for QA/QC records, PDA's and cell phones for data displays, "smart" sensors, Bluetooth communication, transparent housings, USB-powered PC communication, the three year warranty, etc.

Eureka's unique expertise is learning the customers' needs and then adapting the best available technology – especially sensors and software - to meet those needs.

Eureka multiprobes have proven themselves over two decades in every kind of application – deep or shallow; hot or cold; fresh or salt; clean or fouling; lakes, rivers, estuaries, near-shore marine, and process waters in thousands of sites around the world.

Aqua Multiprobe Specifications

Multiprobe specification charts often come with footnotes stating qualifications such as "accuracy specification good at the time and temperature of calibration" or "all values within 1 standard deviation" or "SC accuracy applies only at the calibration point".

To avoid eye strain from reading small print, the Aqua multiprobe specification chart has "lab accuracy" and "field accuracy" columns. The latter gives you a more realistic idea of how your multiprobe performs, over time, under common field conditions.

Sensor	Parameter	Range & Units	Resolution	Lab Accuracy +/-	Field Accuracy +/-	Comments
Temperature	temperature	-5 to 50 C	0.01	0.1	0.1	calibration not required
pH/ORP	рН	0 to 14	0.01	0.1	0.2	refillable reference electrode; corrected for tem- perature,typical sensor life >6 years, optional ORP sensor is combined with pH sensor
	ORP	-999mV to 999mV	1	20	40	
Conductivity	specific conduct- ance, μS/cm	0-5,000	0.1	0.005	0.5% of reading	corrected for temperature; four easy-to-clean graphite electrodes: optional sensor provides
	mS/cm	5-275 mS/cm	0.001	0.01	1-2% of reading	±0.5% of reading accuracy to 100 mS/cm.
	salinity	0 to 70 PSU	0.01	0.02	2% of reading	calculated from conductivity and temperature, PSU is equivalent to ppt
	total dissolved solids (TDS	0-65 g/l	0.1	0.05	5% of reading	
Dissolved oxygen (optical sensor)		0 to 20 mg/l	0.1	0.1	0.01 ±0.1	compensated for temperature and salinity; EPA - approved "lifetime" luminescence method; typi- cal sensor cap life > 6 years
	concentration	20 to 30 mg/l			0.01 ±0.15	
	concentration	30 to 50 mg/l			0.01 ±5% of reading	
	% saturation	0 to 500% saturation				corresponds with the accuracy of the concentration reading
Turbidity	NTU	0 to 1,000	0.01	0.3 or 2% of reading	0.5 or 3% of reading	filtered for non-turbidity spikes; includes wiper to clean the optics; FNU and NTU are interchangeable
		1,000 to 4,000	0.01	4% of reading	5% of reading	
	depth	0 to 25m	0.01	0.05	0.05	compensated for temperature and salinity
		0 to 50m	0.01	0.1	0.1	
		0 to 200m	0.01	0.4	0.4	
Pressure	vented depth	0 to 10m	0.001	0.003	0.003	compensated for temp, salinity, barometric pressure
	barometric pressure	400 to 900 mm Hg	0.1	1.5	1.5	included with depth sensor
	total dissolved gas (TDG)	400 to 1,400 mm Hg	0.1	1	1	compensated for temperature; maximum depth 15m
	chlorophyll a - blue	0 to 100 ug/l	0.01	linearity of 0.99 R ²		highest-quality fluorometric sensors; fluorome- tersoften require non-trivial calibration; custom optics available upon request
	chlorophyll a - red	0 to 500 μg/l				
	rhodamine dye	0 to 200 ppb				
	phycocyanin (freshwater BGA)	0 to 4500 ppb				
	phycoerythrin (marine BGA)	0 to 700 ppb				
Fluorometers	CDOM/FDOM	0 to 500 ppb				
	optical brightener	0 to 300 ppb				
	tryptophan	0 to 5000 ppb				
	fluorescein dye	0 to 150 ppb				
	PTSA	0 to 650 ppb				
	refined oil	0 to 20 ppm				
	crude oil	0 to 300 ppb				

For best accuracy, always calibrate near the anticipated field readings, and near the temperature of the anticipated field readings.

Dimensions including weighted sensor guard and dummy plug:

Aqua 50 - 50 mm diameter, 51.5cm long, 0.82 kg Aqua 75 - 75 mm diameter, 51.5cm long, 1.63 kg (67cm with battery pack) Aqua Mini - 50 mm diameter, 35.6cm long 0.82 kg (61cm with battery pack)

Aqua Mobile

Connectivity is easy with the Aqua Mobile wireless Bluetooth device. It provides an easy, cost effective, and versatile way to capture water quality data from all multiprobes, using Bluetooth enabled display devices.

The Aqua Mobile connects to the multiprobe's underwater cable, any length up to 200 meters. It provides power to the probe, and a wireless connection to a Bluetooth enabled display.

Using the Manta Link App for the display device provides control features, including sensor configuration, instant and automated data capture, file management, calibration, GPS, geo-fencing, and more!

Data files may be emailed for convenience. With Manta Link's black background and large, white letters, your data device is easily read in sunlight.



AQUA MOBILE

Connecting to the Wireless Aqua Mobile

You must first download the Manta Link App to your display, from the Google Play Store, or Apple App Store. Once paired with the Aqua Mobile Bluetooth device, launch the app to connect to the multiprobe.

Aqua Mobile Specifications					
Operating Temperature	-5 to 50⁰ C				
Storage Temperature	-20 to 50° C				
Dimensions	7.62 x 5.08 x 12.7 cm				
Weight	.54 kg				
Materials	PVC, Stainless Steel				
Communications Protocol	BLE 4.2, 10-meter range indoors				
Default Communication Settings	Baud: 19200; Data bits: 8; Parity bits: None; Stop bits: 1				
Battery Type	Lithium rechargeable, 4.4 A-Hr, 11.1 Volt				
Battery Life	Fully charged will run up to 22 continuous hours with 13 sensors. Run time varies but will increase with fewer sensors.				
Charging Requirements	12 V, 2 A, charger included				
Warranty	3 years				
Certifications	CE				

At the heart of each system is the XLink Data Logger which is easy to use and flexible with field upgradeable modem, custom programming, and two-way communication.



OTT XLink 500 Data Logger

Stand-alone compact Monitoring Stations Communication and Data Management Solutions



Aqua Water Quality Multiprobes

Aqua Buoy

Real-time water quality monitoring system!

The Aqua Buoy is a rugged, single person deployable platform for a wide range of below and above water environmental sensors including the Aqua range of Water Quality Multiprobes.

Designed for deployment in lakes, rivers, estuaries, harbours and sheltered coastal areas.

Integrated XLink Data Logger with 4G telemetry.

104mm pass through and deployment tube.

Rugged Fibre reinforced plastic inner and outer shell with marine grade

Polyurethane foam core.

Optional solar (4 x 5 watt) and non-solar towers.

Specifications					
Buoy outer diameter	470mm				
Buoy height	440mm				
Tower height (solar)	160mm				
Deployment tube length	800mm				
Deployment tube ID	104mm				
Weight (Empty)	12kg				
Solar panels (optional)	4 x 5-watt, 12v				
Hull Construction	FRP & polyurethane				
Hardware	316 stainless steel				



Buoy Deployments



New On The XLink

- Plug and Play Modem
- Custom Programming with Python scripting (available with XLink 500)
- HTTPS and FTPS capability added to cellular-Mod-5 modems
- Up to 32 independent measurements
- Expanded log up to 1000000 readings
- Plug-in USB flash drive (Type A Host)
- High resolution analogue and digital measurements
- Support for internet protocols HTTP,TCP/IP and FTP
- Secure communication using TLS 1.2 ciphers
- Independent RS-232 and RS-485
- Switchable SDI-12 power

Applications

- Remote and urban environmental monitoring
- Surface water stream gauging
- Water quality monitoring
- Basic meteorological stations



LinkComm software and mobile app

	XLINK 100	XLINK 500
General information		
Dimensions	11.4 x 15.8 x 4.1 cm	11.4 x 15.8 x 4.1 cm
NEMA-4	18.5 x 24.2 x 13.2 cm	18.5 x 24.2 x 13.2 cm
Weight	0.5 Kg	0.5 Kg
IP rating	IP66 (NEMA variants)	IP66 (NEMA variants)
Operating temperature	-40 °C to +70 °C	-40 °C to +70 °C
Modem Options	IRIDIUM, Cellular (3G, 4G, CAT-M1/LTE-M)	IRIDIUM, Cellular (3G, 4G, CAT-M1/LTE-M)
Compliance	CE, FCC, ISED	CE, FCC, ISED







XLink 100 and XLink 500 Data Loggers