eureka
water probes

Multiprobes built for the field technician™

Take the Manta+ Challenge™

Eureka's Hallmark Features

Reliable data is Eureka's Top Priority. We start with the best sensors on the market and finish with our famously simple user-interface.

Using the Manta is really, really easy. Plug the Manta into a USB port and see live Manta data a few seconds later. Most users teach themselves the Manta operating software in about 15 minutes, without reading the manual.

Why pay more to purchase a multiprobe AND pay more to maintain it? The Manta's modular architecture often saves you thousands of dollars in purchase costs, and our rebuildable reference electrode and long-life DO sensor save you as much as $600 in annual maintenance cost.

Excellent Customer Service is standard equipment. A human is always available to answer you call or email.

New Features in the Manta+

Three-Year Warranty includes the pH sensor, reference electrode, and DO cap.

Event Triggering increases the frequency of data logging when a user-selected parameter changes by a certain amount over a certain time.

Digital Turbidity Sensor has built-in autoranging for excellent performance in near-zero FNU waters, with an upper range to 5000 FNU.

Calibration Stability Indicator tells you when your sensor is stable enough for calibration.

New Sensors include tryptophan/BOD, optical brighteners, bromide, calcium, and sodium ions, fDOM II, chlorophyll red, and transmissivity.

Other new features include: Custom Parameter, Calibration Stability Indicator, Copper-Gauze Antifouling Kit, Expanded Calibration Log, Raw Values, Aquarius™ Compatibility, Battery Voltage Indicator.

manta+™

Trimeter

temperature
depth
+ any other single parameter
including flourometers

20

temp
pH
conductivity
optical DO
(optional depth or ORP)

25

temp
pH
conductivity
turbidity

30

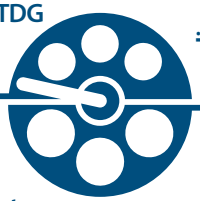
temp
pH
conductivity
optical DO
(optional depth or ORP)
turbidity

35

40

small sensor options

sodium
ammonium
nitrate
chloride
TDG



medium sensor options

PAR
chlorophyll
blue-green algae
rhodamine
crude oil
refined oil
CDOM/FDOM
fluorescein dye
optical brighteners
tryptophan

temp
pH
conductivity
optical DO
+ turbidity

} standard sensors on 35/40

Products

Trimeter - Three Parameters at the Lowest Possible Cost

Get all the features of a Manta, including top-grade sensors and simple software, in an instrument designed for economy. Each Trimeter employs one of any sensor that Eureka offers, plus optional temperature and depth sensors.

A Data Display for Every Application and Budget

The AmphibianPlus is a waterproof, full-function Windows PDA incorporating the Manta user interface, with GPS and cell phone options.

The Bluetooth Battery powers your Manta, and lets you talk wirelessly to the Manta with any Bluetooth-equipped Android or Windows peripheral. You can save up to $1500 by using your own phone instead of a limited-purpose data display.

One Job – One Instrument

The Manta family offers up to 12 sensors in one, integrated package.

Available sensors include temperature, optical DO, pH, ORP, conductivity, depth, level, turbidity, fluorometers including chlorophyll a, chlorophyll red, phycocyanin, phycoerythrin, fDOM, fDOM II, rhodamine, fluorescein, crude oil, refined fuels, optical brighteners, and tryptophan/BOD, CO2, ammonium, nitrate, sodium, calcium, bromide, chloride, TDG, PAR, dual PAR, and transmissivity.

Field-Proven Methods to Minimize Fouling

The Extended Turbidity Brush cleans turbidity and other sensors, such as DO, chlorophyll, and BG algae.

The MiniCleaner is a stand-alone wiper system used when you don't have an Extended Turbidity Brush.

The Copper-Gauze Kit wraps the sensors in copper gauze that slowly dissolves, bathing the sensors with the copper ions that discourage biofouling. Copper gauze is superior to solid copper, which become ineffective once oxidized.

The New Manta Manager

The new Manta Manager retains its predecessors' ease of use and adds new features like event triggering, calibration stability indicator, more QC information options in the permanent calibration log, single-point calibrations, visibility of "raw" sensor values, cut-and-paste of rolling data to MS Office documents, more help screens, a more powerful user-defined-parameter creator, and built-in instruction manual.

Mobile Version

The new Manta Manager also offers a tablet and smartphone version with new "small screen" features like "swipeable" pages and large, high-contrast numbers for easier visibility in sunlight.

DATE	TIME	Temp deg C	pH units	ORP mV	SpCond uS/cm	HDO mg/l	HDO %Sat	pH mV
04/15/16	14:39:55	22.66	5.95	200.3	8.8	4.80	56.4	49.1
04/15/16	14:39:54	22.66	5.95	200.2	8.8	4.80	56.4	48.8
04/15/16	14:39:53	22.66	5.95	200.1	8.8	4.80	56.4	48.9
04/15/16	14:39:52	22.66	5.95	200.0	8.8	4.80	56.5	49.1
04/15/16	14:39:51	22.66	5.95	200.0	8.8	4.80	56.5	48.9
04/15/16	14:39:50	22.66	5.95	199.9	8.8	4.80	56.5	48.8
04/15/16	14:39:49	22.66	5.95	199.8	8.8	4.81	56.6	49.1
04/15/16	14:39:48	22.66	5.95	199.7	8.8	4.81	56.6	48.9
04/15/16	14:39:47	22.66	5.95	199.6	8.8	4.81	56.6	48.9
04/15/16	14:39:46	22.66	5.95	199.6	8.8	4.82	56.6	49.0
04/15/16	14:39:45	22.66	5.95	199.5	8.8	4.82	56.6	49.0
04/15/16	14:39:44	22.66	5.95	199.5	8.8	4.82	56.6	48.9
04/15/16	14:39:43	22.66	5.95	199.4	8.8	4.82	56.6	48.9
04/15/16	14:39:42	22.66	5.95	199.3	8.8	4.82	56.6	48.9
04/15/16	14:39:41	22.66	5.95	199.2	8.8	4.82	56.6	48.9
04/15/16	14:39:40	22.66	5.95	199.2	8.8	4.82	56.7	48.9
04/15/16	14:39:39	22.66	5.95	199.1	8.8	4.82	56.7	48.9
04/15/16	14:39:38	22.65	5.95	199.0	8.8	4.82	56.7	48.9

Accessories for Every Application

Standard accessories include flow cells, copper-gauze anti-fouling kits, cable reels, SDI-12 converters, hard-sided cases, pipe kits to protect logging units in the field, weather stations, auxiliary batteries, auxiliary batteries with Bluetooth, and a full line of calibration standards including secondary calibration standards for fluorometers.

Applications

lakes, rivers, ground water, storm water, estuaries, streams, ponds, near-shore oceanographic, process waters, waste waters, laboratory research

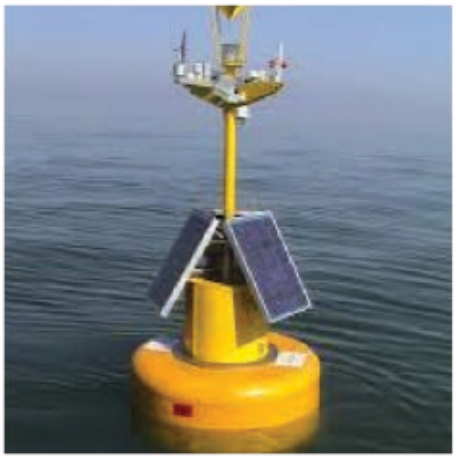
Site to Site Profiling

Process Monitoring

Unattended Logging

Ground Water

Telemetered Deployments



Buoy Deployments

manta2 +™ Multiprobe Specifications

	Trimeter	Manta+20	Manta+25	Manta+30	Manta+35	Manta+40
Diameter	1.85"	1.95"	2.45"	2.95"	3.5"	4.00"
Length - w/o Battery Pack	13.5"	19"	19"	19"	19"	19"
- Add Internal Battery Pack	22"	27"	27"	27"		
Weight - with IBP	2.8 lbs	2.4 lbs	2.5 lbs	5.0 lbs	9.0 lbs	10.0 lbs
- without battery	2.2 lbs	-	-	-	-	-
Number of sensors	Any single sensor plus depth and temp option	Up to 6	Up to 3	Up to 7	Up to 11	Up to 13
Battery Pack	3 "D" cells	2 "D"	2 "D"	8 "C" cells	8 "C" cells	8 "C" cells
Operating Temperature	-5 to 50 C					
Depth Rating	200 m					
Communications	RS-232, SDI-12, USB or Bluetooth					
Sample Rate	1 Hz					
Data Memory	>1,000,000 logged readings					

Amphibian2 Handheld Display

Size	3.6" W x 7.25" L x 1.5" D
Weight	1.3 lbs
Operating System	Microsoft® Windows Embedded Handheld 6.5.3
IP Rating	IP68
Memory and Data Storage	512MB RAM; 8 GB ash - > 8,000,000 logged readings

Sensor Specifications

parameter		range	resolution	accuracy	comments
temperature	water temperature	-5 to 50 C	0.01	0.1	never needs calibration
pH/ORP	pH	0 to 14 units	0.1	0.1 within 10 C of calibration, 0.2 otherwise	refillable reference electrode; corrected for temperature; typical sensor life > 4 years
	ORP	-999 to 999 mV	1	20 mV	platinum ORP sensor is combined with pH sensor
turbidity	turbidity	0 to 40 FNU	4 digits with maximum of two decimals	2% of reading or 0.2	compensated for temperature; filtered for non-turbidity spikes; includes wiper to clean the optics
		40-400 FNU		2% of reading or 0.2	
		400-5000 FNU		2% of range	
	transmissivity	0 to 100% transmission	4 digits	linearity of 0.99R²	WETLabs SeaStar; mounts alongside the Manta
optical dissolved oxygen	concentration	0 to 20 mg/l	0.01	0.1	compensated for temperature and salinity; EPA approved "lifetime" luminescence method; typical sensor cap life > 4 years
		20 to 30 mg/l	0.01	0.15	
		30 to 50 mg/l	0.1	5%	
	% saturation	0 to 500% saturation	0.1%	corresponds with the accuracy of the concentration reading	
conductivity	specific conductance, µS/cm	0 to 5000 µS/cm	4 digits with maximum of one decimal	±0.5% of reading ±0.001	corrected for temperature; four easy-to-clean graphite electrodes; optional sensor provides ±0.5% of reading accuracy to 100 mS/cm.
	specific conductance, mS/cm	0 to 10 mS/cm		±1% of reading ±0.001	
		10 to 100 mS/cm		1% of reading	
		100 to 275 mS/cm		2% of reading	
	salinity	0 to 70 PSS	0.01	0.2	calculated from specific conductance; PSS = Practical Salinity Scale which is roughly equivalent to ppt
	total dissolved solids (TDS)	0 to 65 g/l	0.1	5% of reading	calculated from specific conductance
pressure	depth	0 to 25 m	0.01	0.05	compensated for temperature and salinity; 0.05 m out of 25 m is 2" out of 100 feet; 0.4 m out of 200 m is a football length out of two football fields
		0 to 200 m		0.4	
	vented depth (level)	0 to 10 m	0.001	0.003m	compensated for temp, salinity, barometric pressure
	barometric pressure	400 to 900 mm Hg	0.1	1.5	included with depth sensor
	total dissolved gas (TDG)	400 to 1,400 mm Hg	0.1	1	compensated for temperature; maximum depth 15m
fluorometers	chlorophyll a - blue	0 to 500µg/l	6 digits with maximum of two decimals	linearity of 0.99R²	highest-quality Turner Designs fluorometric sensors; fluorometers often require non-trivial calibration; custom optics available upon request
	chlorophyll a - red	0 to 500µg/l			
	rhodamine dye	0 to 1000 ppb			
	Phycocyanin (freshwater BGA)	0 to 40,000 ppb			
	Phycoerythrin (marine BGA)	0 to 750 ppb			
	CDOM/fDOM	0 to 1250 or 0 to 5000 ppb			
	CDOM/fDOM custom	0 to 1250 or 0 to 5000 ppb			
	optical brighteners	0 to 15,000 ppb			
	tryptophan	0 to 20,000 ppb			
	fluorescein dye	0 to 500 ppb			
	refined oil	0 to 10,000pb			
	crude oil	0 to 1500 ppb			
ion-selective electrodes (ISE's)	ammonium	0 to 100 mg/l as nitrogen	0.1	5% or 2 mg/l	corrected for ionic strength (via conductivity readings); the accuracy specification relies on non-trivial maintenance practice and frequent calibration near the temperature of measurement; ammonium and nitrate require tip replacement every 3 - 6 months
	nitrate	0 to 100 mg/l as nitrogen			
	chloride	0 to 18,000 mg/l			
	sodium	0 to 20,000 mg/l			
	calcium	0 to 40,000 mg/l			
	bromide	0 to 80,000 mg/l			
PAR	photometric PAR	10,000 µmol/sm2	4 digits	5% of reading	LiCor spherical sensor

Warranty

Manta+ Multiprobe	3 years *	Underwater cables	2 years
Amphibian2 Handheld	2 years	Bluetooth Module	3 years
Optical DO Cap	3 years		

FOR BEST ACCURACY, ALWAYS CALIBRATE NEAR THE ANTICIPATED FIELD READINGS, AND NEAR THE TEMPERATURE OF THE ANTICIPATED FIELD READINGS.
*All sensors included except ISE's (Ammonia/nitrate/chloride);
pH sensor included in 3 year warranty
Specifications indicate typical performance and are subject to change

About Us

Eureka was formed in 2002 by industry veterans who believed there was considerable room in the multiprobe market for improvements in technology and customer service. Eureka, an employee-owned partnership, includes the company's founder along with partners from both Europe and Asia with extensive history in the water quality industry.

Eureka Water Probes continues to provide innovative, reliable multiprobes backed by market-leading customer service. Designing and manufacturing the world's best multiprobes remains our sole focus.

Give us a call – we can make your data-collection easier, better and less expensive.

Worldwide Distribution

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For a complete list of our international partners, please see www.waterprobes.com/contact.

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