

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 water quality data a few seconds later. Most users teach themselves the Manta operating software in about 15 minutes.

Why pay more to maintain your water quality monitoring equipment? The Manta's hardware design saves in ongoing maintenance costs. Its optical DO replacement cap has a 3 year life, and its rebuildable (refillable) pH reference electrode eliminates the need to replace the pH sensor every 6 months to a year.

The Manta's LED diagnostic tool tells you when the sonde is set to log, if the Manta is getting ample voltage from line power, battery voltage remaining for models equipped with battery packs, communicating RS-232, and more!

The Manta is the only multiprobe in the industry that can support and record simultaneously, the values from up to 12 sensors. The Manta gives the end user flexibility in configuring a multiprobe for specific applications.

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

New Features in the Manta+

Three-Year Warranty includes all parts of the Manta and installed sensors, except ISE replacement tips and turbidity wiper (2 years) – even the pH sensor, pH reference electrode and replaceable optical DO cap.

Event Triggering increases the frequency of data logging when a user-selected parameter changes by a given amount over a specified period.

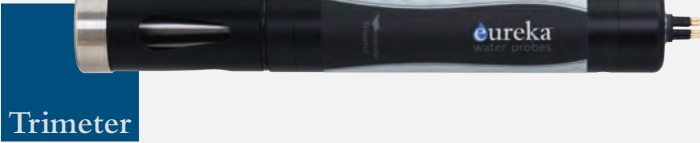
Digital Turbidity Sensor has built-in autoranging for excellent performance in near-zero FNU waters, with an upper range to 5000 FNU.

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

Robust wet-mateable marine connectors insure against water intrusion and connectivity issues due to corrosion.

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

Other new features include: Custom Parameter Option, Copper Gauze Antifouling Kit, Expanded Calibration Log, Optional Display of Raw Value Readings, and Aquarius™ Software Compatibility.



Trimeter

temperature
depth
+ any other single parameter
including flourometers



20

Temp
pH
conductivity
DO (optical)
Depth (optional)
ORP (optional)



25

Temp
pH
conductivity
Turbidity (or any medium sensor)
Depth (optional)
ORP (optional)

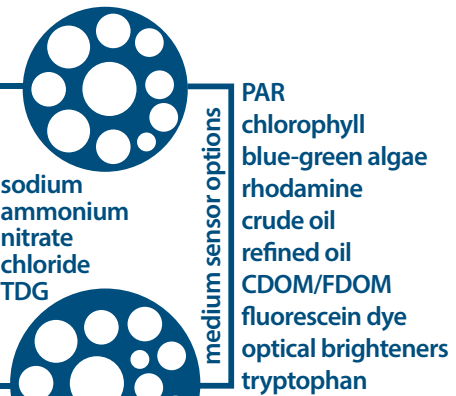


30

Temp
pH
conductivity
DO (optical)
Turbidity (or any medium sensor)
Depth (optional)
ORP (optional)



35



40

temp
pH
conductivity
optical DO
universal wiper
turbidity

} standard 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 Amphibian2 is a waterproof, full-function Windows Mobile PDA incorporating the Manta Manager user-interface, with GPS, camera and cell phone options. It is also easy to read in bright sunlight and super rugged!

Use your own smart phone or other display! The Leapfrog Bluetooth provides power to the Manta, and wireless communication to any Bluetooth-enabled display running the Manta Manager application - Windows Mobile, Windows for PC, or Android.



One Job – One Instrument

The Manta family offers up to 12 sensors in one, integrated package. Each Manta comes standard with a weighted sensor guard, storage and calibration cups, temperature sensor, embedded memory for internal logging, marine connector, electronic manual, MantaManager software and standard three year warranty.

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 becomes 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.



Calibrations	Snapshot	Sensors	Logging	More						
Auto Snapshot is OFF	Take Snapshot	Wipe Turbidity	Help	Logging is OFF						
SS: C:\Users\Colin\Desktop\Barton Springs.csv Log: BLUE Log Int: 15 min ET: Off										
Date	Time	Temp C	SC uS/cm	Sal PSS	TDS mg/l	pH units	ORP mV	DO mg/l	DO %Sat	Depth m
11/18/16	16:29:38	24.38	2077	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:37	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:36	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:35	24.38	2076	1.05	1328	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:34	24.38	2077	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:33	24.38	2076	1.05	1328	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:32	24.38	2077	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:31	24.38	2077	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:30	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:29	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:28	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:27	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:26	24.38	2076	1.05	1328	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:25	24.38	2077	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:24	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:23	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:22	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72
11/18/16	16:29:21	24.38	2076	1.05	1329	6.11	128.1	6.39	79.8	1.72

Accessories for Every Application

Standard accessories include flow cells, copper-gauze anti-fouling kits, cable reels, SDI-12 converters, hard-sided cases, soft padded backpacks, pipe kits to protect logging units in the field, weather stations, Leapfrog 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



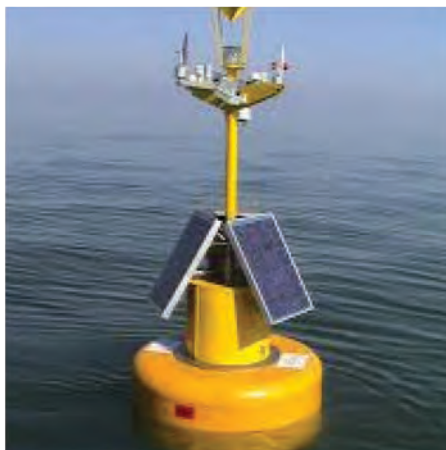
Ground Water



Telemetered Deployments



Buoy Deployments



Manta+™ 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 6	Up to 7	Up to 11	Up to 13
Battery Pack	3 "D"	3 "D"	3 "D"	8 "C"	6 "C"	6 "C"
Operating Temperature	-5 to 50 C					
Depth Rating	200 m, Max depth for ISE and TDG sensors is 15 meters					
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 - > 8,000,000 logged readings

Sensor Specifications

parameter	range	resolution	accuracy	comments	
temperature	temperature	-5 to 50 C	0.01	0.1	never needs calibration
pH/ORP	pH	0 to 14 units	0.01	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 0.99R ²	WETLabs SeaStar; mounts alongside the Manta
dissolved oxygen (optical sensor)	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	
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 0.99R ²	highest-quality Turner Designs fluorometric sensors; fluorometers often require non-trivial calibration; custom optics available upon request
	chlorophyll a - red	> 500µg/l			
	rhodamine dye	0 to 1000 ppb			
	Phycocyanin (freshwater BGA)	0 to 40,000 ppb			
	Phycocyanin (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	3 years
Amphibian2 Handheld	2 years	Leapfrog Bluetooth	3 years (battery – 90 days)
Optical DO Cap	3 years	Turbidity Wiper	2 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. See www.waterprobes.com for current specifications.

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 more cost effective.

Worldwide Distribution



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