Eureka 2 Water-Quality Multiprobe

- **Highly reliable water-quality data from your choice of 23 sensors**
- **Learn the software in 10 minutes**
- **Industry-best customer service**
- **Use in lakes, rivers, estuaries, aquifers**
- **Manual mode, unattended logging mode, and/or real-time telemetry mode**

√RoHS   CE

DESCRIPTION & FEATURES

Multiparameter water-quality multiprobes measure your choice of temperature, dissolved oxygen, conductivity, pH, turbidity, and 18 other parameters – all in one package that delivers data in the toughest field conditions. Our multiprobes are known worldwide for ease of use, reliable data, and economical operation.

The Eureka 2 multiprobe delivers professional-grade data in fresh or salt natural waters to 200 meters deep. It's designed for ease of use with direct USB connection to your PC, automatically loading software, operating-status LED's, and a PDA-based field data display that uses the same software as your PC. With features like a refillable reference electrode and virtually unbreakable cables, the Eureka 2 has the lowest lifetime cost of any multiprobe on the market.

APPLICATIONS

Manual Surveying
Collect data all day at multiple sites; download it directly into MS Excel

Cell or Satellite Telemetry
Turn-key system, real-time data saves manpower costs

Process Control
Let the Eureka 2 monitor multiple process parameters 24/7

Unattended Logging
Collect data for weeks at a time to minimize manpower requirements and safety issues

Eureka 2 Water-Quality Multiprobe
2113 Wells Branch, Suite 4400, Austin TX 78728
www.meas-spec.com
512-302-4333
March 2012
wq.sales@meas-spec.com

Eureka 2 Water-Quality Multiprobe

SENSORS

- temperature
- optical dissolved oxygen (lifetime method)
- polarographic dissolved oxygen
- pH
- conductivity / salinity / TDS
- ORP
- depth

- level / stage
- turbidity
- chlorophyll a
- blue-green algae (marine)
- blue-green algae (fresh)
- ammonium
- nitrate
- chloride

- sodium
- rhodamine
- crude oil
- CDOM
- TDG
- PAR

CONFIGURATIONS

Eureka 2 housing diameters range from 2" to 4.5" depending on how many sensors are needed.

Underwater cables are interchangeable between all housing diameters.

The 2", 2.5", 3", Sub2, and Sub3 models have optional screw-on battery packs with eight "AA" batteries for unattended monitoring (i.e. logging).

The 3.5", 4", and 4.5" have optional internal battery packs with six "C" batteries for unattended monitoring (i.e. logging).

Multiprobes and External Battery Packs Dimensions	diameter, inches	length with weighted sensor \guard, inches	length without weighted sensor guard, inches	weight with weighted sensor guard, pounds	weight without weighted sensor guard, pounds	weight in water with weighted sensor guard, pounds
Eureka 2 – Model 20 and Sub2	1.95	16	14	3	2	2
Eureka 2 – Model 25	2.5	16	14	3	2	1
Eureka 2 – Model 30 and Sub3	3.0	16	14	5	2	1
Eureka 2 – Model 35	3.5	19	14	9	4	3
Eureka 2 – Model 40	4.0	19	14	10	5	2
Eureka 2 – Model 45	4.5	19	14	11	7	2
Model 20 and Sub2 External Battery Pack (2")	1.95	n/a	10	n/a	1	0.0
Model 25 External Battery Pack (2.5")	2.5	n/a	7	n/a	2	0.4
Model 30 and Sub3 External Battery Pack (3")	3.0	n/a	7	n/a	2	0.4

Eureka 2 Water-Quality Multiprobe

ACCESSORIES

- **underwater cables** – use underwater cables with your multiprobe when you are doing manual surveying or using telemetry; they are not necessary for unattended logging applications.

- **power options** – use a Y-cable when you have your own power supply (such as in telemetry systems) or use a Battery Box (rechargeable lithium-ion battery) with a data display or with cables longer than 50 meters; the Battery Box also comes with a Bluetooth option which allows operation of a data display without holding onto the cable at the same time.

- **SDI-12 and TTL adapters** – use the SDI-12 adapter to convert your multiprobe output from RS-232 to SDI-12; use the TTL adapter to make your multiprobe output compatible with third-party devices (such as some data loggers) that require TTL signal levels.

- **battery packs for logging** – order the Internal Battery Pack when you order a 3.5", 4", or 4.5" multiprobe if your application is unattended logging, or order an External Battery Pack at any time for your 2", 2.5", 3", Sub2, and Sub3 multiprobes if your application is unattended logging.

- **calibration solutions** – check out our supply of all the popular calibration solutions at good prices and delivery times.

Eureka 2 Water-Quality Multiprobe
2113 Wells Branch, Suite 4400, Austin TX 78728

www.meas-spec.com
512-302-4333

March 2012
wq.sales@meas-spec.com

measurement
S P E C I A L T I E S™

RELATED PRODUCTS

Eureka Sub2 water-quality multiprobe – the Sub2 is an economical Eureka 2 multiprobe specially configured with temperature, optical dissolved oxygen, pH, conductivity/ salinity/ TDS, ORP, and depth or level built into a housing less than 2" diameter.

Eureka Sub3 water-quality multiprobe – the Sub3 is an economical Eureka 2 multiprobe specially configured with temperature, optical dissolved oxygen, pH, conductivity/ salinity/ TDS, ORP, depth or level, and turbidity built into a housing less than 3" diameter.

Eureka DD2 data displays – the DD2 is a waterproofed PDA useful as a field data display for Eureka 2 multiprobes while retaining all the utility of a PDA; it uses the same user-interface software as the Eureka 2's PC interface so you don't have to learn two software structures.

Eureka TS2 telemetry systems – the TS2 telemetry system installs in the field in minutes with no user programming; you can view data at any Internet connection. The TS2 uses your choice of cellular or satellite communications for high reliability at lowest cost.

Eureka 2 Water-Quality Multiprobe
2113 Wells Branch, Suite 4400, Austin TX 78728

www.meas-spec.com
512-302-4333

March 2012
wq.sales@meas-spec.com

Eureka 2 Water-Quality Multiprobe

measurement
S P E C I A L T I E S™

PERFORMANCE SPECIFICATIONS

parameter	range	resolution	accuracy	comments
temperature	-5 to 50 deg C	0.01	±0.1	never needs calibration
optical dissolved oxygen	0 to 20 mg/l	0.01	±0.2	compensated for temperature and salinity; choose from "intensity" (ODO) or "lifetime" (HDO) fluorescence methods
	20 to 50 mg/l		±10% of reading	
	0 to 200 % sat	0.1	±1% of reading ±0.1 % sat	
	200 to 500 % sat		±10% of reading	
polarographic (Clark) dissolved oxygen	0 to 20 mg/l	0.01	±0.2	compensated for temperature and salinity; requires sample circulator
	20 to 50 mg/l		±0.6	
	0 to 200 % sat	0.1	±3% of reading	
	200 to 500 % sat		±8% of reading	
specific conductance	0 to 10 mS/cm	0.001	±1% of reading ±0.001 mS/cm	corrected for temperature; four easy-to-clean graphite electrodes; optional sensor provides ±0.5% of reading accuracy
	10 to 100 mS/cm	0.01	±1% of reading	
	0 to 1000 µS/cm	0.1	±1% of reading ±1 µS/cm	
	1000 - 100,000 µS/cm	1	±1% of reading	
salinity	0 to 70 PSS	4 digits	±1% of reading ±0.1 PSS	
total dissolved solids (TDS)	0 to 65 g/l	4 digits	±5% of reading	
pH	0 to 14 units	0.01	±0.2	corrected for temperature
ORP	-999 to 999 mV	1	±20	refillable reference electrode
stage (vented level)	0 to 10 mS/cm	0.001	±0.003m (±0.03% of FS)	corrected for barometric
depth	0 to 10 m	0.01	±0.02 (±0.2% of FS)	compensated for temperature and salinity; optional sensors provide higher accuracy
	0 to 25 m	0.01	±0.05 (±0.2% of FS)	
	0 to 50 m	0.1	±0.1 (±0.2% of FS)	
	0 to 100 m	0.1	±0.2 (±0.2% of FS)	
	0 to 200 m	0.1	±0.4 (±0.2% of FS)	
turbidity	0 to 400 NTU	4 digits	± 1% of reading ± 1 count	compensated for temperature; includes wiper to clean the
	400 to 3000 NTU	4 digits	± 3% of reading	
chlorophyll a	0.03 - 500 µg/l	0.01	±3% of full scale	highest-quality fluorometric sensors from Turner Designs; sensor linearity R² = 0.99; accuracy dependent on calibration methods
rhodamine	0.04 - 1000 ppb	0.01	±3% of full scale	
blue-green algae	150 - 150,000 cells/ml	10	±3% of full scale	
CDOM	0-2500 ppb	0.4	±3% of full scale	
crude oil	0-1500 ppb	0.2	±3% of full scale	
ammonium	0 - 100 mg/l as nitrogen	0.1	±10% of reading or 2 mg/l	ISE's; ammonium and nitrate have replaceable tips; ISE's require non-trivial maintenance and calibration
nitrate	0 - 100 mg/l as nitrogen	0.1	±10% of reading or 2 mg/l	
chloride	0.5 - 18,000 mg/l	0.1	±10% of reading or 2 mg/l	
sodium	0.05 to 20,000 mg/l	0.1	±10% of reading or 2 mg/l	
total dissolved gas	400 - 1400 mm Hg	0.1	±1	compensated for temperature