



AquaPlus 便携式溶解氧计

AquaPlus 手持式溶解氧计使用简单、读数精确。共可以检验水质参数 3 个，包括光学溶解氧、电导率、温度。数据通过连接的 GPS 手持器可进行实时查看和记录。每次读取时都会记录 GPS 坐标。



光学溶解氧传感器：



传统上，在便携式现场设备中的 DO 测量是使用称为 Clark Cells 的膜覆盖探测器，即 galvanic method (电偶法原理)。这种类型的探测方式存在包括会对探头隔膜造成污染、校准不稳定以及监测过程中会消耗氧气等问题。

采用光学技术消除了这些问题，不仅去掉了容易被污染的隔膜，还能防止硫化物和其他气体的污染，实现了更高精度测量以及更精确的校准。

这种技术的原理基于 Dynamic Luminescence Quenching (动态荧光猝灭)。该方法相比以往的 galvanic method (电偶法原理) 具有以下优势：

- 1) 读数稳定；
- 2) 易于维护；
- 3) 端盖可持续使用两年以上；
- 4) 无需更换电解质；
- 5) 无需频繁校准。

自动盐度补偿：

在测量饱和度时，水的盐度对溶解氧饱和度测量有影响。AquaPlus 有一个内置的电导率传感器，因此能够基于水中盐度的变化来计算和自动补偿溶解氧读数。





设备信息:

保护等级	IP68 (长期部署)
浸没深度	75mm-100m
工作温度	-5°C - +70°C
尺寸 (长度 x 直径)	250mm x 24mm
重量	400g

水质多参数传感器探头参数:

标准 探 头 参 数	Dissolved Oxygen (溶解氧)	Range	0 – 500.0% / 0 – 50.00 mg/L
		Resolution	0.1% / 0.01mg/L
		Accuracy	0 – 200%: ± 1% of reading. 200% – 500%: ± 10%
	Conductivity (EC) (电导率)	Range	0 – 200 mS/cm (0 – 200,000 μS/cm)
		Resolution	3 Auto-range scales: 0 – 9999 μS/cm, 10.00 – 99.99 mS/cm, 100.0 – 200.0mS/cm
		Accuracy	± 1% of reading
	TDS* (总溶解固体浓度)	Range	0 – 100,000 mg/L (ppm)
		Resolution	2 Auto-range scales: 0 – 9999mg/L, 10.00 – 100.00g/L
		Accuracy	± 1% of reading
	Resistivity* (电阻率)	Range	5 Ωcm – 1 MΩcm
		Resolution	2 Auto-range scales: 5 – 9999 Ωcm, 10.0 – 1000.0 KΩcm
		Accuracy	± 1% of reading
	Salinity* (盐度)	Range	0 – 70 PSU / 0 – 70.00 ppt (g/Kg)
		Resolution	0.01 PSU / 0.01 ppt
		Accuracy	± 1% of reading
	Seawater Specific Gravity* (海水比重)	Range	0 – 50 st
Resolution		0.1 st	





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	pH	Accuracy	± 1.0 st
		Range	0 – 14 pH / ± 625 mV
		Resolution	0.01 pH / ± 0.1 mV
	ORP (氧化还原电位)	Accuracy	± 0.1 pH / ± 5 mV
		Range	± 2000 mV
		Resolution	0.1mV
	Temperature (温度)	Accuracy	± 5 mV
		Range	-5°C – +70°C
		Resolution	0.01° C/F
离子探头参数	Ammonium (铵)	Accuracy	$\pm 0.5^\circ$ C
		Range	0 – 9,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 – 99.99 mg/L, 100.0 – 9,000 mg/L
	Ammonia (氨)	Accuracy	$\pm 10\%$ of reading
		Range	0 – 9,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 – 99.99 mg/L, 100.0 – 9,000 mg/L
	Chloride (氯化物)	Accuracy	$\pm 10\%$ of reading
		Range	0 – 20,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 – 99.99 mg/L, 100.0 – 20,000 mg/L
	Flouride (氟化物)	Accuracy	$\pm 10\%$ of reading
		Range	0 – 1,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 – 99.99 mg/L, 100.0 – 999.9 mg/L
	Nitrate (硝酸盐)	Accuracy	$\pm 10\%$ of reading
		Range	0 – 30,000mg/L (ppm)
		Resolution	2 Auto-range scales: 0.00 – 99.99 mg/L, 100.0 – 30,000 mg/L
	Calcium (钙)	Accuracy	$\pm 10\%$ of reading
		Range	0 – 2,000mg/L (ppm)
			Resolution





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		Accuracy	± 10% of reading	
	Turbidity (浊度)	Range	0 – 3000 NTU	
		Resolution	2 Auto-range scales: 0.0 99.9 NTU, 100 – 3000 NTU	
		Repeatability	± 2% of reading	
	Chlorophyll (叶绿素)	Range	0 – 500 µg/L (ppb)	
		Resolution	0.01 µg/L	
		Repeatability	± 2% of reading	
	藻蓝蛋白	Range	0 – 300,000 cells/mL	
		Resolution	1 cell/mL	
		Repeatability	± 2% of reading	
	藻红蛋白	Range	0 – 200,000 cells/mL	
		Resolution	1 cell/mL	
		Repeatability	± 2% of reading	
	Rhodamine WT Dye (罗丹明 WT)	Range	0 – 500 µg/L (ppb)	
		Resolution	0.01 µg/L	
		Repeatability	± 5% of reading	
	Fluorescein Dye (荧光素染色剂)	Range	0 – 500 µg/L (ppb)	
		Resolution	0.01 µg/L	
		Repeatability	± 5% of reading	
Refined Oil (精炼油)	Range	0 – 10,000 µg/L (ppb)		
	Resolution	0.1 µg/L		
	Repeatability	± 10% of reading		
CDOM/FDOM 有色可溶性有机物/ 荧光溶解有机物	Range	0 – 2,000mg/L (ppm)		
	Resolution	2 Auto-range scales:0.00 – 99.99 mg/L, 100.0 – 2,000mg/L		
	Repeatability	± 10% of reading or 2ppm		

