

Portable Optical Dissolved Oxygen Meters



Main Features

- Cutting-edge Optical DO sensor accurately measures dissolved oxygen in an effortless manner
- Quick and easy calibration for saturated oxygen and zero oxygen
- Large backlit LCD screen, simultaneously displaying DO and temperature.
- Complete test kit in a rugged carrying case



Conventional DO vs. Optical DO

	Polarography or galvanic DO sensor	Optical DO sensor
Measurement	Consume oxygen during test — unstable readings. Users have to stir probes at a certain speed to get stable readings.	Adopts luminescent technologies. No oxygen being consumed during test — readings get stabilized quickly.
Calibration	Serious polarization problem will occur, requiring frequent calibration	No polarization. No need to calibrate frequently.
Performance	Slower response, poorer repeatability, lower accuracy	Fast response, good repeatability, high accuracy
Maintenance	Need to replace membrane, replenish electrolytes, and clean cathodes and anodes	No electrolytes to replenish; No cathodes and anodes to clean.
Lifetime	Short service life. Need to replace the membrane frequently.	The replaceable membrane cap's service life >8000 hours

Intelligent Functions

- Auto. Temperature Compensation; Auto. Barometric Compensation
- Auto. Salinity Compensation (DO8500 only)
- GLP data logger with 500 sets of data storage (DO8500 only)
- Data export via USB to PC-link software (DO8500 only)
- Fully customizable settings for DO unit, resolution, auto. reading lock, salinity compensation, barometric pressure calibration, and more



Technical Specifications

	Model	DO850	DO8500	
	Parameter	DO/temp.	DO/Salinity/temp.	
Dissolved Oxygen	Range	(0 to 20.00) ppm (mg/L); (0 to 200.0) %		
	Resolution	0.01/0.1mg/L (ppm); 0.1/1%		
	Accuracy	±2% reading or ±2% saturation, whichever is greater; ±2% reading or ±0.2 mg/L, whichever is greater		
	Response time	≤30s (25°C, 90% response)		
	Calibration point	Saturated oxygen & zero oxygen		
	Temperature compensation	Automatic, (0 to 50.0) °C		
	Pressure compensation	Automatic, (60 to 120) kPa		
	Salinity Compensation	Manual, (60 to 120) kPa	Automatic or manual, (60 to 120) kPa	
Temperature	Range	(0 to 50.0) °C		
	Resolution	0.1 °C		
	Accuracy	±0.5°C		
Instrument Functions	Display	LCD (white backlight)		
	Stable reading indication	😊 icon		
	Automatic hold	Yes	Yes	
	Date and time	/	Yes	
	Data Storage	/	500 sets	
	Auto. timing data logger	/	Yes	
	USB data output	/	Yes	
	IP rating	IP57 waterproof		
Others	Power	AA battery x3 (1.5V×3)		
	Dimension/weight only meter	88×170×33mm/313g		
	Dimension/weight for kit	360×270×76mm/1.5kg	360×270×76mm/1.6kg	
	What's included	DO850 meter DO803 DO probe (3M cable) Calibration sleeve+carrying case	DO8500 meter DO803 DO probe(3M cable) 2301-3M salinity electrode Calibration sleeve+carrying case Combination probe clip, USB cable+software flashdrive	