

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