Eutech PD 450

pH / mV / Dissolved Oxygen / Temperature

Affordable optical RDO technology reduces maintenance time and costs

- Maintenance free optical probe with no electrolyte eliminates hassle of replacing delicate membranes and salt build up from refilling solutions
- **Switch between pH, mV, % saturation and mg/L (ppm) dissolved oxygen –** With the press of a button
- Durable waterproof and dustproof design with IP67 rating
- Large, backlit graphic display provides measurement with temperature
- Calibrate up to 5 points automatically with USA or NIST buffer groups (up to 6 points with DIN). New manual option allows calibration with up to 5 custom buffer standards
- **Auto buffer recognition –** Automatically identifies the correct pH buffer for rapid calibration
- **Calibration due alarm –** Set a visible reminder when it is time to recalibrate the meter
- **Selectable ºC or ºF –** Choose units to best fit your application
- Ready indicator, manual or automatic measurement hold feature and optional automatic shutoff function
- **Store up to 500 data sets –** Easy USB or RS232 output with optional data cables
- **Built-in real-time clock stamps stored data and calibration data with time and date –** Meets standards for GLP (Good Laboratory Practices)

Calibration Chamber | RDO Weight/Guard | RDO Sensor Cap | RDO Probe

Specification Table

pH	Range	-2.00 to 16.00 pH
	Resolution	0.01 pH
	Accuracy	±0.01
	Calibration	Up to 6 points: USA, NIST, DIN or custom
mV	Range	±2000 mV
	Resolution	0.1 mV ±999.9 mV; 1 mV beyond
	Accuracy	±0.2 mV +2 LSD or +0.5 % of reading; whichever is greater
	Calibration	±200 mV
Dissolved Oxygen	Range	0 to 200 %; 0 to 20 ppm/mg/L
	Resolution	0.10 %; 0.1 ppm/mg/L
	Accuracy	±2 %; ±0.1 ppm or mg/L up to 8; ±0.2 ppm or mg/L above 8
	Calibration	Zero and saturation
Temperature	Range	-10.0 to 110.0 ºC (14.0 to 230.0 ºF)
	Resolution	0.1 ºC/ºF
	Accuracy	±0.5 ºC; ±0.9 ºF
	Calibration	Offset in 0.1 increments, ±10 ºC or ±18 ºF
Display		Custom LCD with backlight
Memory		Stores up to 500 data sets
Output		USB or RS232
Real-Time Clock		Time and date stamp on calibration and stored data
Temperature Compensation		Automatic or manual from -10 to 110 ºC
Pressure & Salinity Compensation		Manual
Power		Two AA batteries (included), >100 hours (without backlight); AC adapter (optional)

Ordering Information

Order Code	Part No.	Description
Meter		
ECPDWP45000	01X651641	**PD 450 Meter Only:** Meter, two AA batteries
ECPDWP45004	01X651646	**PD 450 Meter & Electrodes:** Meter, pH/ATC electrode, RDO electrode with sensor cap, two AA batteries
ECPDWP45004K	01X651642	**PD 450 Meter Kit:** Meter, pH electrode, RDO electrode with sensor cap, two AA batteries, hard carry case, USB cable, RDO stainless steel weight/guard, RDO calibration chamber, calibration solutions
Electrodes		
ECDA9350603B	93X218879	Replacement pH electrode, submersible, single-junction, ABS, 26 mm diameter, BNC, 3 m cable
RDO3M	RDO3M	RDO probe, 3 m (10 ft) cable
RDO6M	RDO6M	RDO probe, 6 m (20 ft) cable
RDO15M	RDO15M	RDO probe, 15 m (50 ft) cable
Accessories		
RDOCAP	RDOCAP	Replacement RDO sensor cap
RDOWEIGHT	RDOWEIGHT	RDO weight, screw thread to attach to probe
RDOCALCHAMBER	RDOCALCHAMBER	Calibration chamber
60X426401	60X426401	Optional 100 / 240 VAC SMPS power adapter, 9 V, 6 W
MINIPHONEUSB	MINIPHONEUSB	USB cable for 450 series, mini phone plug to USB
30X427301	30X427301	RS232 cable for 450 series, mini phone plug to RS232 9-pin (F)
ECDOZEROSOLN	01X211238	Zero oxygen solution, 0 % DO, 480 mL

Comparison Tables

Meter Features

Meter Features	pH 150	CON 150	pH 450	CON 450	DO 450	PD 450	PC 450
	See Page 4	See Page 5	See Page 6	See Page 7	See Page 8	See Page 9	See Page 10
pH & mV	✓	–	✓	–	–	✓	✓
ION	–	–	✓	–	–	–	–
Temperature	✓	✓	✓	✓	✓	✓	✓
Conductivity & TDS	–	✓	–	✓	–	–	✓
Optical Dissolved Oxygen	–	–	–	–	✓	✓	–
Salinity	–	–	–	✓	–	–	–
Display	Three line custom LCD		Three line custom LCD with backlight				
Temperature Compensation	Automatic or manual from -10 to 110 ºC						
Temperature Coefficient	–	0.00 to 10.00 %/ºC	–	0.00 to 10.00 %/ºC	–		0.00 to 10.00 %/ºC
Memory	150 data sets		500 data sets				
Output	–		USB or RS232				
Real-Time Clock	–		Time and date stamp on calibration and stored data				
Power	Two AA batteries (included)						
	>700 hours continuous use	>500 hours continuous use	>500 hours (without backlight)	>300 hours (without backlight)	>100 hours (without backlight)		
	9 V DC adapter, 1.3 A (100/240 VAC, SMPS) (optional)						
Dimensions (L x W x H)	Meter: 7$^7/_8$" x 3$^1/_8$" x 2 ¼" (20 x 8.3 x 5.7 cm) ; Boxed: 9$^1/_8$" x 9$^1/_8$" x 2 ¾" (23 x 23 x 7 cm)						
Weight	Meter: 1 lb (0.5 kg) ; Boxed: 1.4 lb (0.7 kg)						

Eutech 150 Series & Eutech 450 Series Configurations

Order Code	Product Combination	Double-Junction pH Electrode (ECFC7252201B)	pH Electrode, 26 mm Diameter (ECDA9350603B)	Combi pH/Con/ATC Electrode (COMBI03BW)	Conductivity/ATC Electrode, K = 1 (CONSEN91W)	ATC Probe (PHWPTEM01W)	RDO Electrode With Cap (RDO3M)	Glip-Clip™	Hard Carry Case	USB Cable	RDO Stainless Steel Weight/Guard	RDO Calibration Sleeve	60 mL Bottles of pH 4, pH 7, Storage Solution, DI Water	60 mL Bottles of 1413 µS, 12.88 mS, 111.8 mS, DI Water
		Electrodes						Accessories					Solutions	
ECPHWP15000	pH 150 Meter Only							✓						
ECPHWP15002	pH 150 Meter & Electrode	✓				✓		✓						
ECPHWP15002K	pH 150 Meter Kit	✓				✓		✓	✓				✓	
ECCONWP15003	CON 150 Meter & Electrode				✓			✓						
ECCONWP15003K	CON 150 Meter Kit				✓			✓	✓					✓
ECPHWP45000	pH 450 Meter Only							✓						
ECPHWP45002	pH 450 Meter & Electrode	✓				✓		✓						
ECPHWP45002K	pH 450 Meter Kit	✓				✓		✓	✓	✓			✓	
ECCONWP45003	CON 450 Meter & Electrode				✓			✓						
ECCONWP45003K	CON 450 Meter Kit				✓			✓	✓	✓				✓
ECDOWP45000	DO 450 Meter Only													
ECDOWP45003	DO 450 Meter & Electrode						✓							
ECDOWP45003K	DO 450 Meter Kit						✓		✓	✓	✓	✓		
ECPDWP45000	PD 450 Meter Only													
ECPDWP45004	PD 450 Meter & Electrodes		✓				✓							
ECPDWP45004K	PD 450 Meter Kit		✓				✓		✓	✓	✓	✓	✓	
ECPCWP45000	PC 450 Meter Only							✓						
ECPCWP45004	PC 450 Meter & pH & Con/ATC Electrodes	✓			✓			✓						
ECPCWP45004K	PC 450 Meter Kit	✓			✓				✓	✓	✓		✓	✓
ECPCWP45003	PC 450 Meter & Combi Electrode			✓										
ECPCWP45003K	PC 450 Meter Combi Kit			✓					✓	✓			✓	✓

Features

DO 450 and PD 450
Utilize Optical
Oxygen Technology

PC 450 Can Accept
Combi Probe or
Separate pH/
Conductivity Probes

new

**81 % Larger Three Line
Display** 450 series
add backlight

Battery Life Indicator

**All Measurements
Include Temperature
in ºC or ºF**

**View Electrode Slope or
Probe Efficiency
At-A-Glance**

Calibration Due Reminder
Set automatic notifications
from 0 - 60 days

Increased Memory:
150 points for 150 series,
500 points with
date/time for 450 series

450 series offers upgradable
firmware and also can utilize
Free Communication Software

EUTECH INSTRUMENTS   PC 450

MEAS

7.30 pH

READY

22.8 ºC

98.8 %

CAL/MEAS/BACK   ENTER/HOLD

SETUP   SAVE

MODE   VIEW

**Rugged Housing Floats
& Meets Waterproof
IP67 Rating**
(With rubber covers)

**Utilizes New and
Improved Grip-Clip™
Electrode Holder**
(See page 11
for more details)

**Uses Only Two AA
Batteries or
Optional Universal
Power Supply**

Integral Built-In-Stand
for table use or
wall mounting

3 Year Meter Warranty

**450 Models Offer
Output for
USB or RS232**

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Use the above details to contact us if this literature doesn't answer all your questions.

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.