

Eutech PC 450



pH / mV / Conductivity / Total Dissolved Solids / Salinity / Temperature

PC 450 accepts a single pH/Con probe or separate pH and conductivity probes

- Durable waterproof and dustproof design with IP67 rating
- Switch between pH, mV, conductivity, TDS and salinity with a press of a button
- **Large, backlit custom display** – Lets you view measurement with temperature
- **Grip-Clip™** – Quickly and easily secures separate pH and conductivity electrodes simultaneously to your sample container or beaker
- 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 you
- **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
- **Intuitive, user-friendly icons** – Electrode status displays pH slope or cell constant
- **Auto-range conductivity from 0 to 199.9 mS in five ranges** – With up to five calibration points
- **Selectable cell constant** – 0.10, 1.00 or 10.0
- **Adjustable temperature coefficient** – From 0.00 to 10.00 % per °C
- **Conductivity-to-TDS factor** – Adjustable from 0.40 to 1.00
- **Selectable °C/°F** – 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)
- 500 hours battery life or use optional universal power adapter
- **Built-in stand with wall-mount** – Allows for easy benchtop measurement and storage



Specification Table

pH	Range	-2.00 to 16.00 pH
	Resolution	0.01 pH
	Accuracy	±0.01 pH
	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
Conductivity	Range	0 to 200 mS; 0 to 20 mS if using COMBI03BW probe
	Resolution	0.01 µS to 0.1 mS
	Accuracy	±1 % full scale
	Calibration	Auto/manual; one point per range
TDS	Range	0 to 200 ppt (TDS factor 1.0)
	Resolution	0.01 ppm to 0.1 ppt
	Accuracy	±1 % full scale
	Calibration	Manual; 1 point/range
Temperature	Range	-10.0 to 110.0 °C (14.0 to 230.0 °F)
	Resolution	0.1 °C/°F
	Accuracy	±0.5 °C; ±0.9 °F
	Calibration	Offset in 0.1 increments, ±10 °C or ±18 °F
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	
Power	Two AA batteries (included); >100 hours (without backlight); AC adapter (optional)	



Ordering Information

Order Code	Part No.	Description
Meter		
ECPCWP45000	01X651636	PC 450 Meter Only: Meter, two AA batteries
ECPCWP45004	01X651639	PC 450 Meter & pH & Con/ATC Electrodes: Meter, double-junction pH electrode, conductivity cell (K = 1.0), Grip-Clip™, two AA batteries
ECPCWP45004K	01X651640	PC 450 Meter Kit: Meter, double-junction pH electrode, conductivity cell (K = 1.0), Grip-Clip™, two AA batteries, hard carry case, USB cable, calibration solutions
ECPCWP45003	01X651637	PC 450 Meter & Combi Electrode: Meter, combi pH/Con/ATC electrode, two AA batteries
ECPCWP45003K	01X651638	PC 450 Meter Combi Kit: Meter, combi pH/Con/ATC electrode, two AA batteries, hard carry case, USB cable, calibration solutions
Electrodes		
ECFC7252201B	01X099417	Replacement pH electrode, double-junction, epoxy body, BNC
PHWPTM01W	PHWPTM01W	ATC probe. Use with any pH electrode with BNC connector for temperature compensation
COMBI03BW	COMBI03BW	Combination pH/Con/ATC probe
ECCONSEN72W	93X244303	Conductivity/ATC cell, glass body, K = 0.1
CONSEN91W	01X244702	Conductivity/ATC cell, K = 1.0
CONSEN92W	CONSEN92W	Conductivity cell, K = 10
Accessories		
GRIPCLIP	GRIPCLIP	Grip-Clip™
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)

See page 6 for pH calibration solutions & page 7 for conductivity calibration solutions.



Comparison Tables

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 °C							
Temperature Coefficient	–	0.00 to 10.00 %/°C	–	0.00 to 10.00 %/°C	–	–	0.00 to 10.00 %/°C	
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)			
Dimensions (L x W x H)	9 V DC adapter, 1.3 A (100/240 VAC, SMPS) (optional)							
Weight	Meter: 7 7/8" x 3 1/8" x 2 1/4" (20 x 8.3 x 5.7 cm) ; Boxed: 9 1/8" x 9 1/8" x 2 3/4" (23 x 23 x 7 cm)							
	Meter: 1 lb (0.5 kg) ; Boxed: 1.4 lb (0.7 kg)							

Eutech 150 Series & Eutech 450 Series Configurations		Electrodes						Accessories					Solutions	
		Double-Junction pH Electrode (ECFC725201B)	pH Electrode, 26 mm Diameter (ECDA9350603B)	Combi pH/Con/ ATC Electrode (COMBI03BW)	Conductivity/ATC Electrode, K = 1 (CONSEN91W)	ATC Probe (PHWPTM01W)	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
Order Code	Product Combination							✓						
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



81 % Larger Three Line
Display 450 series
add backlight

Battery Life Indicator

All Measurements
Include Temperature
in °C or °F

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



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



450 Models Offer
Output for
USB or RS232





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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.

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