# all in one **CONDUCTIVITY METER** Model : PCD-431 ISO-9001, CE, IEC1010



## **FEATURES**

- \* 2 ranges : 2,000 uS, 20 mS.
- \* Temperature measurement,  $^{\circ}C$  /  $^{\circ}F$
- \* Automatic temperature compensation.
- \* Probe with the meter, all in one.
- \* Carbon rode electrode, high reliability.
- \* Data hold, Record (max., min.).
- \* IP-67 Water resistance, heavy duty.
- \* External calibration buttons.
- \* DC 1.5V battery ( UM-4, AAA ) x 4.





The Art of Measurement

### Pen type, all in one, IP-67 CONDUCTIVITY METER Model : PCD-431

#### FEATURES

*	All in one pen type conductivity meter provides fast,
	accurate readings with digital reading.
*	Conductivity measurement ( uS, mS ) or TDS
	( Total Dissolved Solids, ppm ) can be selected.
*	Conductivity : Two ranges, 2,000 uS, 20.00 mS.
*	TDS : Two ranges, 20,000 ppm, 2,000 ppm.
*	Carbon rod electrode for long life.
*	Build in temperature sensor, ATC ( auto temperature
	compensation ).
*	Temperature measurement, °C, °F.
*	IP67, water proof and protection.
*	LCD with two displays show conductivity and Temp.
	value at same time.
*	Data hold function for freezing the desired value.
*	Auto power off to save the battery life.
*	Records max. and min. value with recall.
*	Microcomputer circuit, intelligent function, high accuracy.
*	Compact size, light weight.
*	Power supply by DC 1.5 V battery ( UM4/AAA ) x 4 PCs,
*	Available for wide applications, such as aquarium,
	beverage, fish hatcheries, food processing,
	photography, laboratory, quality control, school &
	colleges, swimming pools, water conditions.

Operating	0 to 50 $^\circ\!\!{ m C}$ ( 32 to 140 $^\circ\!{ m F}$ ).
Temperature	
Operating	Less than 80% RH.
Humidity	
Power Supply	DC 1.5V battery ( UM-4/AAA ) x 4 PCs.
Power	Approx. 5.7 mA.
Consumption	
Dimension	190 x 40 x 40 mm
	( 7.5 x 1.6 x 1.6 inch ).
Weight	171 g/0.38 LB.
Standard	Instruction Manual 1 PC
Accessories	
Power off	Auto shut off saves battery life or
	manual off by push button.
	* Power will off automatically after
	10 min., if no button be pressed.
Standard	Instruction Manual 1 PC
Accessories	
Optional	* Soft carrying case with sash
Accessories	( 210 x 80 x 50 mm ), Model : CA-52A
	* Hard carrying case
	( 280 x 195 x 65 mm ), Model : CA-06
	* 1.413 mS Conductivity Standard
	Solution, Model : CD-14A

#### SPECIFICATIONS

Display	LCD, size : 20 mm x 28 mm.
Measurement	* Conductivity ( uS, mS )
	* TDS ( Total Dissolved Solids, ppm )
	* Temperature (°C,°F)
Ranges	Conductivity:
* two ranges	2000 uS, 20.00 mS
* auto range	TDS :
5	2,000 ppm 20,000 ppm
Accuracy	± (2% FS + 1 d)
* 23 ± 5 °C	* FS : full scale
Temperature	Automatic from 0 to 60 $^\circ$ C (32 - 140 $^\circ$ F),
Compensation	with temperature compensation factor
	variable between 0 to 5.0% per C.
Conductivity	Carbon rod electrode for long life.
Probe	
Structure	
Data Hold	Freeze the display reading.
Memory Recall	Maximum & Minimum value.
Sampling	Approx. 0.8 second.
Time	
Circuit	Custom one-chip of microprocessor LSI
	circuit.
Power off	Auto shut off saves battery life or
	manual off by push button.
	* Power will off automatically after
	10 min., if no button be pressed.

#### ELECTRICAL SPECIFICATIONS (23±5°C)

#### A. Conductivity

Range	Measurement	Resolution	Accuracy
2000 uS	2 to 2000 uS	1 uS	± (3% F.S.+1d)
20 mS	2 to 20.00 mS	0.01 mS	* F.S Full scale
* Auto range			
* Temperatul	re Compensation :		
Automatic i	from 0 to 60 °C ( 32 - 1	40 $^\circ\!F$ ), with tempe	prature
compensati	ion factor variable betw	een 0 to 5.0% per (	С.
* mS - milli Si	mens * uS - micro	Simens * 23± 5	5°C

#### B. TDS ( Total Dissolved Solids )

Range	Measurement	Resolution	Accuracy
2,000 ppm	132 to 1,320 ppm	1 ppm	± (3% F.S.+1d)
20,000 ppm	1,320 to 13,200 ppm	10 ppm	* F.S Full scale
* Auto range.		·	
* Temperature	Compensation :		
Automatic fr	om 0 to 60 $^\circ\!\!\!C$ ( 32 - 140	$^{\circ}\!F$ ), with tempe	prature
compensatio	n factor variable betweer	n 0 to 5.0% per	$\mathcal{C}.$
* ppm - parts µ	per million * $23 \pm 5^\circ C$		

#### C. Temperature

Function	Measuring Range	Resolution	Accuracy
°C	0 ℃ to 60 ℃	0.1 ℃	0.8 °C
°F	32 °F to 140 °F	0.1 °F	1.5 °F