

*Pen type, 2,000 uS/20 mS, IP 67*

# CONDUCTIVITY METER

**Model : PCD-431**

*ISO-9001, CE, IEC1010*



**Lutron**

**LUTRON ELECTRONIC**

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

## 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 : 2,000 ppm 20,000 ppm
Accuracy	± ( 2% FS + 1 d ) * 23 ± 5 °C * FS : full scale
Temperature Compensation	Automatic from 0 to 60 °C ( 32 - 140 °F ), with temperature compensation factor variable between 0 to 5.0% per C.
Conductivity Probe Structure	Carbon rod electrode for long life.
Data Hold	Freeze the display reading.
Memory Recall	Maximum & Minimum value.
Sampling Time	Approx. 0.8 second.
Circuit	Custom one-chip of microprocessor LSI circuit.
Power off	Auto shut off saves battery life or manual off by push button. <i>* Power will off automatically after 10 min., if no button be pressed.</i>

## ELECTRICAL SPECIFICATIONS (23± 5 °C)

### A. Conductivity

Range	Measurement	Resolution	Accuracy
2000 uS	0 to 2000 uS	1 uS	± (2% F.S. + 1d)
20 mS	2 to 20.00 mS	0.01 mS	* F.S. - Full scale

\* Auto range.  
\* Temperature Compensation :  
Automatic from 0 to 60 °C ( 32 - 140 °F ), with temperature compensation factor variable between 0 to 5.0% per C.  
\* mS - milli Simens    \* uS - micro Simens    \* 23± 5°C

### B. TDS ( Total Dissolved Solids )

Range	Measurement	Resolution	Accuracy
2,000 ppm	0 to 1,320 ppm	1 ppm	± (2% F.S. + 1d)
20,000 ppm	1,320 to 13,200 ppm	10 ppm	* F.S. - Full scale

\* Auto range.  
\* Temperature Compensation :  
Automatic from 0 to 60 °C ( 32 - 140 °F ), with temperature compensation factor variable between 0 to 5.0% per °C.  
\* ppm - parts per million    \* 23± 5°C

### C. Temperature

Function	Measuring Range	Resolution	Accuracy
°C	0 °C to 60 °C	0.1 °C	0.8 °C
°F	32 °F to 140 °F	0.1 °F	1.5 °F
@ 23± 5°C			