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

# **CONDUCTIVITY METER**

Model: PCD-431 *ISO-9001, CE, IEC1010* 





The Art of Measurement

## Pen type, all in one, IP-67

### **CONDUCTIVITY METER**

Model: PCD-431

#### **FEATURES**

_	LATIONES					
*	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, ${}^{\circ}\!C$ , ${}^{\circ}\!F$ .					
*	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 &					
L	colleges, swimming pools, water conditions.					
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Operating	0 to 50 $^{\circ}\mathrm{C}$ ( 32 to 140 $^{\circ}\mathrm{F}$ ).	
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	

#### **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 ℃	* FS : full scale		
Temperature	Automatic from 0 to 60 $^{\circ}\mathrm{C}$ (32 - 140 $^{\circ}\mathrm{F}$ ),		
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.		
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#### ELECTRICAL SPECIFICATIONS (23 $\pm$ 5 $^{\circ}$ C)

Measurement

#### A. Conductivity

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 $^{\circ}\text{C}$ ( 32 - 140 $^{\circ}\text{F}$ ), with temperature					
compensation factor variable between 0 to 5.0% per C.					
* mS - milli Simens					

Resolution Accuracy

Resolution Accuracy

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

\* ppm - parts per million \*  $23 \pm 5^{\circ}$ C

Measurement

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 $^{\circ}\mathrm{C}$ ( 32 - 140 $^{\circ}\mathrm{F}$ ), with temperature					
compensation factor variable between 0 to 5.0% per $^{\circ}\!$					

#### C. Temperature

Range

Function	Measuring Range	Resolution	Accuracy
$^{\circ}\!\mathbb{C}$	0 ℃ to 60 ℃	0.1 ℃	0.8 ℃
°F	32 °F to 140 °F	0.1 °F	1.5 °F
@ 23± 5℃	•		