

*2,000  $\mu$ S/20 mS, separate probe*

# CONDUCTIVITY METER

**Model : PCD-432**

*ISO-9001, CE, IEC1010*



**Lutron**

**LUTRON ELECTRONIC**

*The Art of Measurement*

**Pen type, separate probe**

# CONDUCTIVITY METER

**Model : PCD-432**

## FEATURES

|                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Pen type conductivity meter provides fast, accurate readings with digital reading.                                                                                                            |
| * Separate electrode, easy operation.                                                                                                                                                           |
| * 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.                                                                                                                                                              |
| * 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. |

## SPECIFICATIONS

|                              |                                                                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Display                      | LCD, size : 20 mm x 28 mm.                                                                                                               |
| Measurement                  | * Conductivity ( uS, mS )<br>* TDS ( Total Dissolved Solids, ppm )<br>* Temperature ( °C, °F )                                           |
| Ranges                       | <i>Conductivity:</i><br>2000 uS, 20.00 mS<br><i>TDS :</i><br>2,000 ppm 20,000 ppm                                                        |
| * two ranges                 |                                                                                                                                          |
| * auto range                 |                                                                                                                                          |
| Accuracy                     | ± ( 2% FS + 1 d )<br>* 23 ± 5 °C<br>* 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.<br>* Power will off automatically after 10 min., if no button be pressed. |
| Operating Temperature        | 0 to 50 °C ( 32 to 140 °F ).                                                                                                             |

\* Appearance and specifications listed in this brochure are subject to change without notice.

|                      |                                                                                                                                            |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 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            | <i>Meter :</i><br>190 x 40 x 40 mm<br>( 7.5 x 1.6 x 1.6 inch ).<br><i>Conductivity PROBE :</i><br>Round, 22 mm Dia. x 120 mm length.       |
| Weight               | 230 g/0.51 LB.                                                                                                                             |
| Standard Accessories | Instruction Manual..... 1 PC                                                                                                               |
| Power off            | Auto shut off saves battery life or manual off by push button.<br>* Power will off automatically after 10 min., if no button be pressed.   |
| Standard Accessories | Instruction Manual..... 1 PC<br>Conductivity Probe, CDPB-03..... 1 PC                                                                      |
| Optional Accessories | * Soft carrying case with sash<br>( 210 x 110 x 55 mm ),<br>Model : CA-05A<br>* Hard carrying case<br>( 280 x 195 x 65 mm ), Model : CA-06 |

## 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.<br>* Temperature Compensation :<br>Automatic from 0 to 60 °C ( 32 - 140 °F ), with temperature compensation factor variable between 0 to 5.0% per C.<br>* mS - milli Simens * uS - micro Simens * 23± 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.<br>* Temperature Compensation :<br>Automatic from 0 to 60 °C ( 32 - 140 °F ), with temperature compensation factor variable between 0 to 5.0% per °C.<br>* 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 |                 |            |          |