

# PH CONTROLLER/MONITOR

Model : PPH-2108

ISO-9001, CE, IEC1010



## FEATURES

- \* 0 to 14 pH x 0.01 pH.
- \* ATC ( automatic temperature compensation ).
- \* Control setting, Alarm setting.
- \* Control relay output, alarm relay output.
- \* Power : 90 ACV to 264 ACV, 50/60 Hz.
- \* RS-232 computer interface.
- \* DIN size : 96 x 48 mm. Depth : 107 mm.
- \* Optional pH electrode, ATC probe.



 **Lutron**

**LUTRON ELECTRONIC**

*The Art of Measurement*

# PH CONTROLLER/MONITOR

Model : PPH-2108

## FEATURES

|   |
|---|
| * Professional pH and Temp. measurement monitor and controller.   |
| * pH range : 0 to 14 pH x 0.01 pH.  |
| * pH function with high input impedance avoids measuring error.   |
| * Optional Temp. probe ( ATC probe, Automatic Temp. Compensation probe ) is available for pH measurement compensation and the Temp. measurement.  |
| * Wide manual temperature compensation for pH function, adjustment can be easily operated by push button on the front panel.  |
| * pH calibration is easily to be done by push button on the front panel.  |
| * Build in pH control relay and the Temp. control relay.  |
| * Relay will be make action ( On/Off ) when the reading value reach high limit or low limit value.  |
| * Temperature Offset value setting.   |
| * Hysteresis value setting for high and low alarm.  |
| * °C, °F temp. unit setting with default.   |
| * Large red LED display, high brightness and easy to read.  |
| * RS232 computer interface, send out the pH and the temperature data at the same time.  |
| * Optional pH electrode.  |
| * Optional Temperature probe ( ATC probe ).   |
| * Optional data acquisition software.   |
| * Optional GSM controller.  |
| * Microprocessor circuit ensures high accuracy and provides special functions and features.   |
| * Standard 96 X 48 mm DIN case.   |
| * Wide applications: water conditioning, aquariums, beverage, fish hatcheries, food processing, photography, laboratory, paper industry, plating industry, quality control, school & college. |

## GENERAL SPECIFICATIONS

|   |   |   |
|---|---|---|
| Display                                     | 4 digits red LED, digit size : 14 mm.   |   |
| Circuit                                     | Custom chip of microprocessor LSI circuit.  |   |
| Range                                       | PH  | 0 to 14 PH  |
|   | Temp.   | -30 to 100 °C   |
| Display Unit                                | pH  | pH  |
|   | Temp.   | °C, °F  |
| pH Input Impedance                          | 10 <sup>12</sup> ohm  |   |
| Temperature Compensation for pH measurement | Manual  | -30 to 100 °C, be adjusted by push button on front panel. |
|   | Automatic ( ATC )   | With the optional Temp. probe ( TP-07A )<br>0 to 65 °C.   |
| pH Calibration                              | PH7, PH4, and PH10, 3 points calibration ensure the best linearity and accuracy.                              |   |
| pH Electrode                                | Optional,<br>Any PH electrode with BNC connector.   |   |
| Temp. Probe ATC Probe                       | Optional, 0 to 65 °C, TP-07A  |   |
| Probe Calibration Period Setting            | Can set the meter's total operation period to warn the user to make the new calibration for the pH electrode. |   |
|   | * PCPS function   |   |

|                       |   |   |
|-----------------------|---|---|
| Sampling Time         | Approx. 1 second.   |   |
| Relay outputs         | Number  | 2 relays  |
|                       | Function  | Relay 1 :<br>pH control relay.<br>Relay 2 :<br>Temperature control relay. |
|                       | Max load  | 1 ACA/250 ACV<br>1 DCA/24 DCV   |
| Setting value         | 1. High limit value setting.<br>2. Low limit value setting.<br>3. Hysteresis value setting.<br>4. Temp. Offset value setting.<br>* 1, 2, 3 Setting for pH and Temp. function. |   |
| External Power Supply | DC 12 V, 50 mA max.   |   |
| Data Output           | RS 232 PC serial interface.   |   |
| Operating Temperature | 0 to 50 °C.<br>* Meter  |   |
| Operating Humidity    | Less than 80% R.H.<br>* Meter   |   |
| Power Supply          | 90 to 260 ACV, 50/60 Hz.  |   |
| Power Consumption     | Approx. 4.7 VA/AC 110V.<br>Approx. 5.3 VA/AC 220V.  |   |
| Weight                | 384 g/ 0.84 LB. * Meter only.   |   |
| Dimension             | DIN size : 96 x 48 mm.  |   |
|                       | Depth : 110 mm.   |   |
| Accessories Included  | Instruction manual..... 1 PC<br>Case holder with screw.....2 PCs  |   |
| Optional Accessories  | PH electrodes :<br>* Industrial in line pH electrode, PE-21<br>* General purpose PH electrode, PE-03  |   |
|                       | PH buffer solution :<br>* pH 7 buffer solution, PH-07, PH-07A.<br>* pH 7 buffer solution, PH-04, PH-04A.  |   |
|                       | * Temp. probe ( ATC probe ), TP-07A   |   |
|                       | * Data Acquisition software,<br>SW-U801-WIN.  |   |
|                       | * RS232 cable, UPCB-02.<br>* USB cable, USB-01.   |   |
|                       | * GSM controller, GSM-889.<br>* Interface cable ( cable between meter to GSM-889 ), GMCB-89.  |   |

## ELECTRICAL SPECIFICATIONS (23 ± 5 °C)

### pH ( meter only )

| Range      | Resolution | Accuracy          |
|------------|------------|-------------------|
| 0 to 14 PH | 0.01 PH    | ± (0.02 PH + 2 d) |

### Temperature

( used optional Temp. probe, TP-07 A )

| Measurement | Range          | Resolution     | Accuracy |
|-------------|----------------|----------------|----------|
| °C          | 0 °C to 65 °C  | 0 °C to 65 °C  | 0.8 °C.  |
| °F          | 32°F to 149 °F | 32°F to 149 °F | 1.5 °F.  |