

PC2000 pH / Conductivity Dual Channel Controller



Features & Benefits

Potence Controls PC2000 series DUAL CHANNEL Analyzers for pH/ORP/Conductivity/TDS measurements incorporate state of the art technology to provide flexible and reliable solutions to the customer for their Process Monitoring and Control needs. Any two of the measurements from pH / Redox (ORP) / Conductivity / Total Dissolved Solids (TDS) can be freely selected for use with the PC2000 Analyzer via software, thus reducing the need of individual dedicated controllers; the PC2000 can be picked up off the shelf and can be used for any 2 of the above measurements.

The large backlit display has been designed to operate in all types of environments and provides information on Main Measured value and Temperature simultaneously. PC2000 not only Measures but provides Retransmission via 2 nos. of 4-20mA outputs and RS-485 digital communication.

The Analyzer is suitable for all types of mounting such as Wall; Pipe and Panel. The simple keypad and logical menu structure make the PC2000 easy to use. All stored parameters and calibration data are retained in the Non-volatile memory in case of Power failure. All these and several more features make this Analyzer very useful product for both OEMS and End Users alike.

- Dual Channel Analyzer
- Selectable for any 2 of pH / ORP / Conductivity / TDS in any combination
- High visibility Backlit display
- Guided calibration procedures
- 2 nos. 4-20 mA Isolated Outputs
- 4 nos. Relay Outputs
- Modbus RS 485 Output
- Non Volatile Memory

Controller Specifications

- Measurement : pH/ORP or Conductivity or Total Dissolved Solids (TDS)
(Freely selectable via software)
- Display : Graphic LCD with Backlit display
- Display Dimension : 60*30 mm
- Power Requirements : 100 – 270 VAC \pm 10%, 50/60 Hz
- Operating Conditions : Temperature : 0 - 65°C, RH – 0-95% Non-condensing
- Storage Conditions : Temperature : 0 - 75°C,
- Analog Output Signal : Two Nos. 4-20 mA isolated current outputs, max 600 Ω
- Analog Output Function : Retransmission
- Relays : Four Nos. electromechanical SPDT ; 10A ;115/230 VAC
- Relays Operational Mode : Control and Alarm
- Digital Communication : Modbus RS 485 Output
- Memory : Non Volatile
- Calibration Methods : Refer Sensor Data details
- Test / Maintenance : Provides Analog Output Test Signals to confirm operation
of connected devices and Test Relay Operation
- Enclosure : Thermoset Plastic ; SS
- Enclosure Dimension : H*W*D (144*144*132) mm
- Conduit Entry / Nos. : 1/2" NPT; 6 Nos.
- Enclosure Rating : IP 65
- Mounting : Wall ; Pipe ; Panel
- Weight : Approx. 1.60 Kg

PC2000 Controller Specifications when used with

pH / ORP Sensors

Measuring Range

| | |
|-----|--------------------|
| pH | : 0.00 to 14.00 pH |
| ORP | : -2000 to 2000 mV |

Resolution

| | |
|-----|--------------|
| pH | : 0.01 pH |
| ORP | : ± 1 mV |

Accuracy*

| | |
|-----|--------------------------|
| pH | : $\pm 0.2\%$ of Reading |
| ORP | : ± 10 mV |

Temperature Compensation

Automatic or manual

Temperature Input Range (For pH)

| | |
|----------------|------------------------------|
| Pt100 / Pt1000 | : -15 to 150°C (-5 to 302°F) |
|----------------|------------------------------|

Calibration Methods

- 2-point buffer (pH only)
- 1-point sample (pH or ORP)

Conductivity Sensors

Measuring Range

| | |
|--------------|--------------------------------------------------------------------------|
| Conductivity | : $\mu\text{S/cm}$: 0.00-20.00, 0.0-200.0, 0-2000 mS/cm : 0.00-20.00 |
| TDS | : ppm : 0.00-10.00, 0.0-100.0, 0-1000 ppt : 0.00-10.00 |

Resolution

| | |
|--------------------|---------------------|
| Conductivity / TDS | : As per Range Set. |
|--------------------|---------------------|

Accuracy*

| | |
|--------------|-------------------------|
| Conductivity | : $\pm 1\%$ of Reading. |
| TDS | : $\pm 1\%$ of Reading. |

Temperature Compensation

Automatic or manual

Temperature Input Range

| | |
|----------------|------------------------------|
| Pt100 / Pt1000 | : -20 to 200°C (-4 to 392°F) |
|----------------|------------------------------|

Calibration Methods

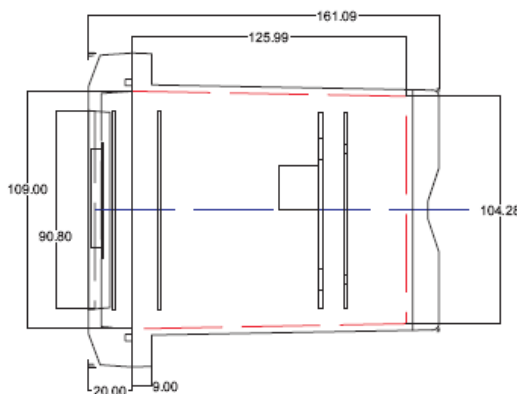
Zero point and 1 point sample

*These performance specifications are typical at 25°C.

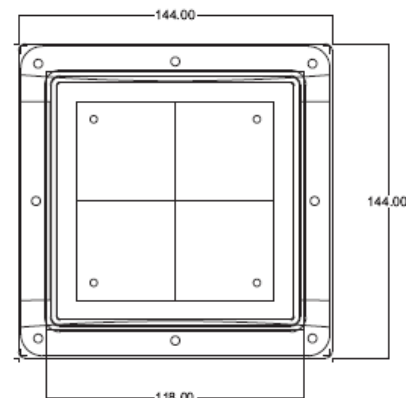
Dimensional Drawing



FRONT VIEW



SIDE VIEW



PANEL CUT-OUT

All dimensions are in mm.

Ordering Information

| | |
|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Model Number : PC2000 : Indicator / Controller ; 100 -270 VAC ; 50 / 60 Hz ; 4-20 mA ; Relays ; RS 485 | |
| | Sensor Input Type : 1: Single Channel 2: Dual Channel |

- Model Selection :**
1. PC2000-1 : Single Channel Input type Controller.
 2. PC2000-2 : Dual Channel Input type Controller.

Also Consider Our pH and Conductivity Sensors



In the interest of improving and updating, PCPL reserves the right to alter specifications at any time.