

PC1000 pH / Conductivity Single Channel Controller



Features & Benefits

Potence Controls PC1000 series Analyzer for pH/ORP/Conductivity/TDS measurements incorporates the latest technology to provide highly reliable, flexible, feature-packed device that satisfies a diverse range of process monitoring and control applications. Measurements such as pH / Redox (ORP) or Conductivity / Total Dissolved Solids (TDS) are freely selectable via software thus reducing the need of individual dedicated controllers, the PC1000 can be picked up off the shelf and can be used for any 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. PC1000 not only Measures but provides Retransmission via 2 nos. of 4-20mA outputs and RS-485 digital communication.

The Panel mounted Analyzer is suitable for use by both OEMS and End Users alike. The simple keypad and logical menu structure make the PC1000 easy to use. All stored parameters and calibration data are retained in the Non-volatile memory in case of Power failure.

- Multi parameter Measurements of pH / ORP / Conductivity / TDS eliminates the need for a variety of dedicated controllers.
- High visibility Backlit display
- Guided calibration procedures
- 2 nos. 4-20 mA Isolated Outputs
- 2 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 : Two 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 : ABS
- Enclosure Dimension : H*W*D (96*96*110) mm
- Enclosure Rating : IP 54
- Mounting : Panel
- Weight : Approx. 0.550 Kg

PC 1000 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

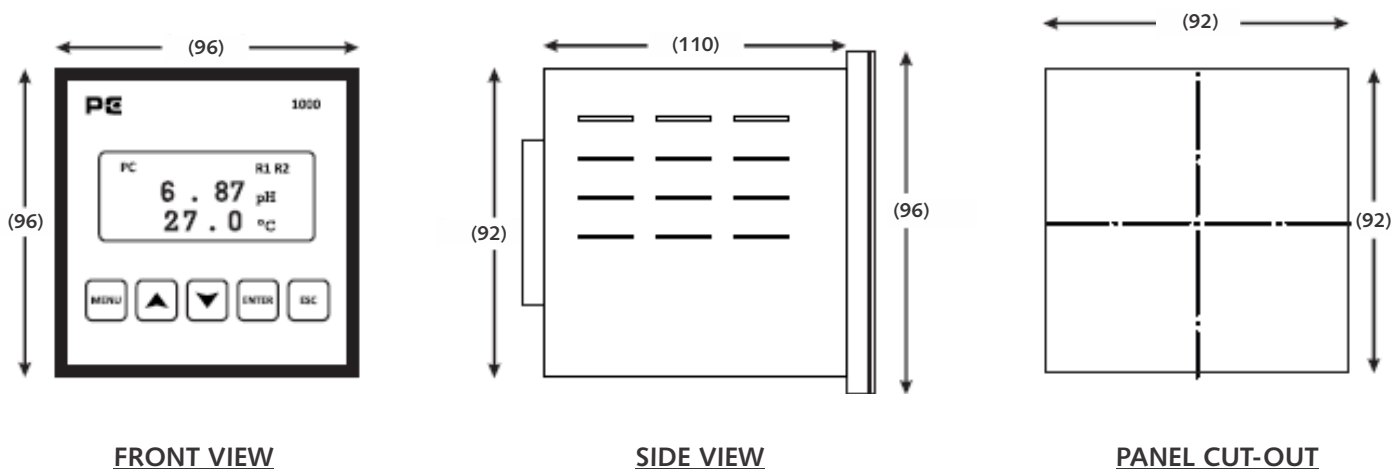
Pt100 / Pt1000	: -20 to 200°C (-4 to 392°F)
----------------	------------------------------

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 :

PC1000 : Indicator / Controller ; 100 -270 VAC ; 50 / 60 Hz ; 4-20 mA ; Relays ; RS 485 ; Panel Mount

Also Consider Our pH and Conductivity Sensors



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