# PC1000 pH/Conductivity Single Channel Controller


## Features & Benefits

Potence Controls PC1000 Series Analyzer for pH/ORP/Conductivity/TDS measurements incorporate 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 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 – 20 mA 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. 4-20mA Isolated Outputs.
- 2 nos. Relay Outputs
- Modbus RS485 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 | : | 90 - 270 VAC ± 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 - 20mA isolated current outputs, max 600Ω |
| Analog Output Function | : | Retransmission |
| Relays | : | Two Nos. Electrochemical 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 & Test Relay Operation |
| Enclosure | : | ABS |
| Enclosure Dimension | : | H x W x D (96 x 96 x 110mm) |
| Conduit Entry / Nos. | : | 1/2" NPT; 6 Nos. |
| Enclosure Rating | : | IP54 |
| Mounting | : | Panel |
| Weight | : | Approx. 0.550 kg |

## PC1000 Controller Specifications when used pH / ORP Sensors

### Measuring Range

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

### Resolution

pH : 0.01 pH
ORP : ± 1 mV

### Accuracy

pH : ±0.2% of full scale
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 Buffer (pH or ORP)

## Conductivity Sensors

### Measuring Range

Conductivity : µS/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 : ± 1% of full scale
TDS : ± 1% of full scale

### Temperature Compensation

Automatic or Manual

### Temperature Input Range

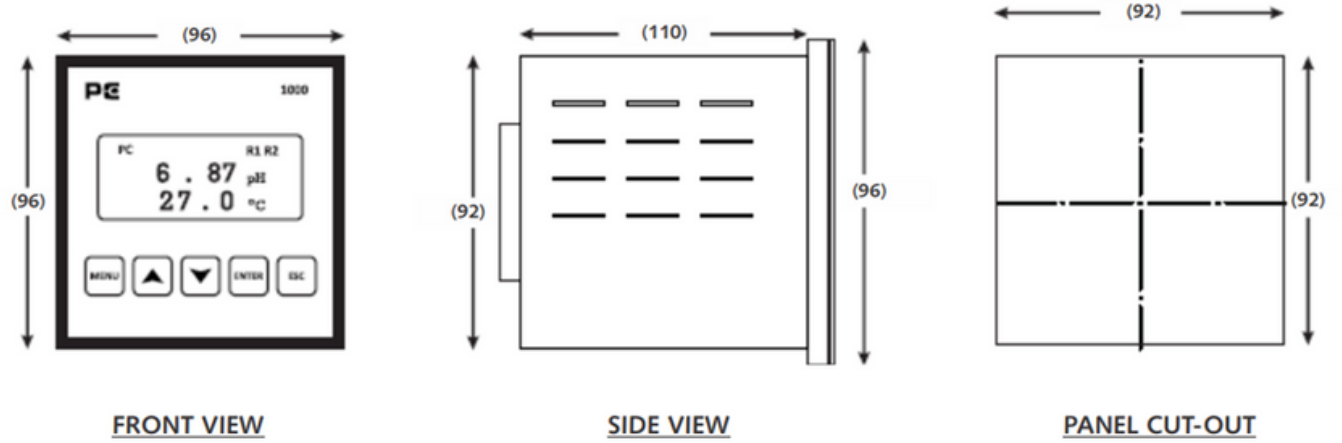
Pt100 / Pt1000 : -20 to 200°C (-4 to 392°F)

### Calibration Methods

Zero point and 1point 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; 90-270 VAC; 50/60 Hz; 4-20mA; Relays; RS485; 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.

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