

#### PC2000 pH/Conductivity Single/Dual Channel Controller



### Features & Benefits

Potence Controls PC2000 series Single/Dual Channel Analyzers 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 4–20 mA 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 Nonvolatile 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.

- Single/Dual Channel Analyzer
- Selectable for any 2 of pH / ORP / Conductivity / TDS in any calibration.
- 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 :  $90 - 270 \text{ VAC} \pm 10\%$ , 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 - 20mA isolated current outputs, max 600  $\Omega$ 

Analog Output Function : Retransmission

Relays : Four Nos. Electrochemical SPDT; 10 A; 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 : Thermoset Plastic ; SS

Enclosure Dimension :  $H \times W \times D$  (144 x 144 x 132 mm)

Conduit Entry / Nos. : 1/2" NPT; 6 Nos.

Enclosure Rating : IP65

Mounting : Wall; Panel; Pipe

Weight : Approx. 1.60 kg



# PC2000 Controller Specifications when used 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 : ±0.2% of Full scale

ORP :  $\pm$  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 :  $\mu$ 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

Conductivity/TDS : As per Range Set

Accuracy

Resolution

Conductivity :  $\pm$  1% of Full scale TDS :  $\pm$  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

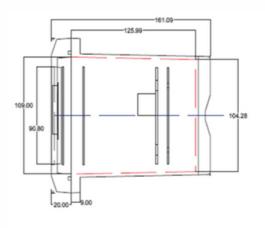
<sup>\*</sup>These performance specifications are typical at 25°C

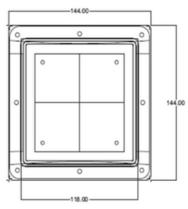


## **Dimensional Drawing**

144 mm







**SIDE VIEW** 

**PANEL CUT-OUT** 

### **Ordering Information**

#### **Model Number:**

PC2000 : Indicator/Controller; 90 - 270 VAC; 50/60 Hz; 4-20mA; Relays; RS485; Panel Mount

#### **Sensor Input Type:**

- 1: Single Channel
- 2: Dual Channel

Mode 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.