

# pH/ORP Preamplifiers



## PHTX Series



- ✓ Isolated or Non-Isolated Models Available
- ✓ 4 to 20 mA Output
- ✓ Manual or Automatic Temperature Compensation



PHTX-11, isolated 4 to 20 mA transmitter, shown smaller than actual size

PHTX-014, non-isolated 2-wire transmitter, shown smaller than actual size

The model PHTX-014 pH two wire transmitter is designed to provide a standard 4 to 20 mA current output which is proportional to the pH being measured. Its small size and encapsulated construction allow for easy installation and will accommodate any pH electrode with a BNC connector. Temperature compensation is either manual or automatic with use of any 1000Ω Platinum RTD.

The PHTX-212 is the same as the PHTX-014 but with a range of 2 to 12 pH. This is a popular choice for use with recorders or any application where it is convenient to divide the output into ten divisions.

The PHTX-ORP is for an ORP electrode input with a range of 0 to 2000 mV. The PHTX-11 features include a NEMA-4X housing, an integral LCD display for continuous pH reading or for a direct corresponding readout in milliamps, using a convenient push-button switch. The 4 to 20 mA output signal may be scaled in the field to meet specific pH ranges in any 1 to 14 pH unit increment. Temperature compensation is manual using a fixed resistor or automatic using any of OMEGA's 700 Series thermistors.

### Specifications

#### Range:

- PHTX-014: 0 to 14 pH
- PHTX-212: 0 to 12 pH
- PHTX-ORP: 0 to 2000 mV
- PHTX-11: Any 1 to 14 pH units user selectable output

#### Accuracy:

- PHTX-014, PHTX-212, PHTX-11: ±0.02 pH
- PHTX-ORP: ±1.0 mV

#### Operating Temperature:

- PHTX-014, PHTX-212, PHTX-ORP: -25 to 70°C (-13 to 158°F)
- PHTX-11: -10 to 60°C (14 to 140°F)

#### Input Impedance: > 10<sup>13</sup> Ω

#### Temperature Compensation:

- Manual: fixed resistors;
- Automatic: PHTX-014, PHTX-212: 1000 Ω platinum RTD
- PHTX-11: OMEGA's OL-700 series thermistor

#### Connector: BNC

Power: 12 to 80 (24 Vdc recommended)

#### Output:

- PHTX-014, PHTX-212, PHTX-ORP: Non-isolated 4 to 20 mA
- PHTX-11: Isolated 4 to 20 mA

#### Input to Output Isolation:

PHTX-11: 600 V max

#### Dimensions:

- PHTX-014: 50.8 H x 38.1 W x 24.1 mm D (2 x 1.5 x 0.95")
- PHTX-212, PHTX-ORP: 57.4 H x 38.1 W x 24.1 mm D (2.25 x 1.15 x 1.5")
- PHTX-11: 125 H x 74.2 W x 99.6 mm D (4.92 x 2.92 x 3.92")

#### Display:

PHTX-11: 3½ digit LCD

#### Display Resolution:

PHTX-11: 0.01 pH

| To Order  |  |
|-----------|--|
| Model No. | Description  |
| PHTX-212  | Non-isolated 2 wire pH transmitter, 2 to 12 pH                             |
| PHTX-014  | Non-Isolated 2-wire pH transmitter, 0 to 14 pH                             |
| PHTX-ORP  | Non-Isolated 2-wire ORP transmitter  |
| PHTX-11   | Isolated 4 to 20 mA pH transmitter with integraldisplay, NEMA-4X enclosure |
| PSS-D12B  | 12 or 24 Vdc power supply  |

Comes complete with operator's manual.

Ordering Example: PHTX-11, isolated 4 to 20 mA transmitter, PSS-D12B, power supply. PHTX-014, non-isolated 2-wire pH transmitter, PSS-D12B power supply.