

INDUSTRIAL pH 2-WIRE 4-20 mA TRANSMITTERS



NEWPORT PRODUCT INFO

• [MANUAL - PDF](#) 

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PHTM-014, PHTM-212, PHTM-ORP, PHT422I

Non-isolated 2-wire Transmitter

- ✓ **Isolated or Non-Isolated Models Available**
- ✓ **4 to 20 mA Output**

The **PHTM Series** 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 1000 ohm Platinum RTD.

The **PHTM-014** covers the full 0 to 14 pH range. The **PHTM-212** with a 2 to 12 pH input is the popular choice for use with recorders or any application where it is convenient to divide the 4 to 20 mA output into ten divisions.

The **PHTM-ORP** is for an ORP electrode input with a range of 0 to 1000 mV.

The **PHT422I** 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 4-20 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 **NEWPORT's 700 Series** thermistors.



PHT422I Isolated 4-20 mA Transmitter. pH Electrodes purchased separately.

SPECIFICATIONS

Range: 0 to 14 pH, 2 to 12 pH, 0 to 1000 mV

Span

PHTM-014: 0 to 14 pH

PHTM-212: 2 to 12 pH

PHTM-ORP: 0 to 1000 mV

PHT422I: Any 1 to 14 pH unit, user selectable output

Accuracy: ±0.02 pH

PHTM: ±1.0 mV**Operating Temperature****PHTM-014, PHTM-212, PHTM-ORP:** -25 to 70°C (-13 to 158°F)**PHT422I:** -10 to 60°C (14 to 140°F)**Temperature Compensation****Manual:** fixed resistors**Automatic**

- PHTM-014, PHTM-212, 1000 ohm RTD
- PHT422I NEWPORT 700 Series thermistor

Connector: BNC**Input Impedance:** >10¹³ Ohms**Power Input:** 12 to 80 Vdc (24 Vdc recommended)**Output****PHTM-014:** Non-isolated 4 to 20 mA**PHTM-212:** Non-isolated 4 to 20 mA**PHTM-ORP:** Non-isolated 4 to 20 mA**PHT422I:** Isolated 4 to 20 mA**Input to Output Isolation:** PHT422I, 600 V maximum**Dimensions****PHTM-014, PHTM-212, PHTM-ORP:** 57.4 H x 38.1 W x 38.1 mm D (2.25" x 1.5" x 1.5")**PHT422I:** 125 H x 74.2 W x 99.6 mm D (4.92" x 2.92" x 3.92")**Display****PHT422I:** 3 1/2 digit LCD**Display Resolution****PHT422I:** 0.01 pH

Product Selection (Specify Model Number)		
Part Number	Description	Qty.
PHTM-014	Non-isolated 4 to 20 mA pH transmitter, 0 to 14 pH range	
PHTM-212	Non-isolated 4 to 20 mA pH transmitter, 2 to 12 pH range	
PHTM-ORP	Non-isolated 4 to 20 mA pH transmitter, 0 to 1000 mV range	
PHT422I	Isolated 4 to 20 mA pH transmitter with integral display, NEMA 4X enclosure	
PSS-D12B	12 or 24 Vdc power supply	