

# PATHFINDER INSTRUMENTS

## WATER QUALITY TRANSMITTERS

### PATHFINDER Model EMIT-pH



The Model **EMIT-PH** (encapsulated miniature isolated transmitter) is a 2-wire, 4-20 mA pH transmitter featuring input to output isolation, high performance and small size.

The transmitter accepts as its input any pH electrode via a BNC coaxial connector. It transforms the probe signal to a 4 to 20mA current proportional to the pH level. This output may be transmitted over two wires to a control location, the same 2 wires provide power to the transmitter. Any D.C. power supply from 12 to 36V may be used. There are two adjustments on the transmitter to standardize probes for "Slope" and "Cal". The output can be monitored with a loop powered meter, a loop resistor or a multimeter during the standardization procedure.

Temperature compensation is automatic with use of a platinum resistance temperature probe with an alpha of .00375W/W/°C and 1000W at 0°C. Manual temperature compensation is achieved with use of a fixed resistor on the transmitter terminal strip.

### SPECIFICATIONS

<b>Input: 0-14pH</b>	<b>Output: 4-20mA</b>
<b>Power Supply: 12 to 36VDC</b>	<b>Load Resistor: 0 to 750W at 24VDC</b>
<b>Linearity: <math>\pm 0.02</math> pH Units</b>	<b>Input-Output Isolation: 1000V RMS</b>
<b>Operating Temperature Range: -25 to +70°C Temperature</b>	<b>Temperature Compensation: Manual or automatic</b>
<b>Reverse Polarity Protection: Internal diode</b>	<b>Dimensions: 2" x 2" x 1.25"</b>