

### Product Description

The L02-03-0101 Outdoor Temperature and RH combination sensor has a 0-10VDC RH output signal and a 10K Ohm (Type III) thermistor output for measuring the temperature. The L02-03-0101 sensor should be used to measure the relative humidity and temperature in both indoor and outdoor applications

The Advanced Ceramic Technology design overcomes the limitations of other resistance-based humidity sensors that utilize water soluble polymer coatings. The Advanced Ceramic Technology enables these sensors to fully recover from condensation. This allows the sensor to maintain its accuracy over a longer period of time.

Despite its accuracy, the Advanced Ceramic Technology sensor and related circuitry is economical. Field calibration is achieved by toggling either the increment or decrement dip switch. Each toggle will allow for a +/- 0.5% RH increase or decrease. Accuracy is maintained over the entire operating range, using a thermistor for temperature compensation. Precision production tolerances maintain sensor interchangeability to within +/- 3% nominal.

Each L02-03-0101 Outdoor humidity transmitter is calibrated at 3 different points, using an NIST Traceable Temperature/Humidity chamber.



### Features and Application Highlights

A few of the most common applications are:

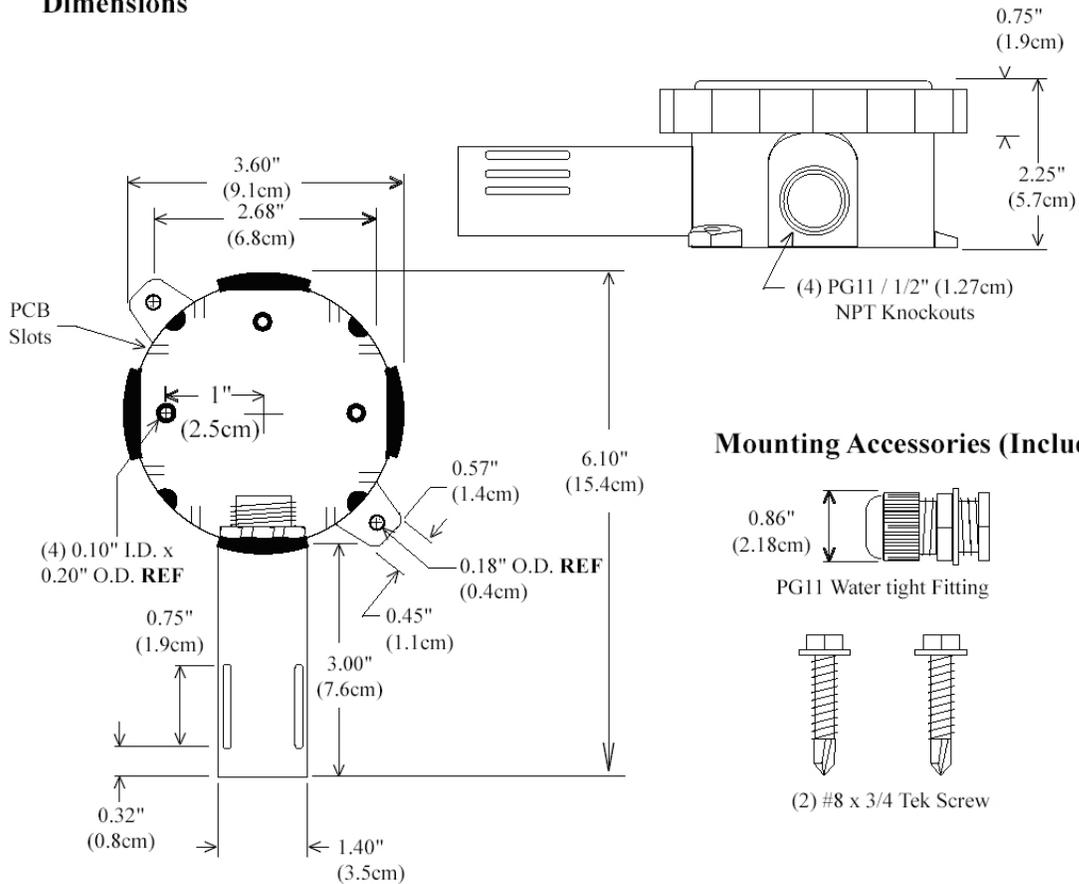
- Monitoring Outdoor Temp and RH
- Cold Storage Warehouses
- Wash Down Applications

### Technical Data

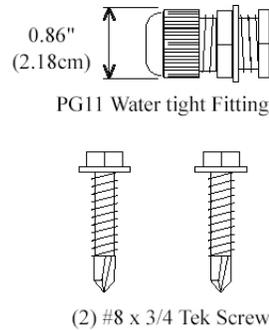
<b>Supply Voltage</b>	• +18 to 36 VDC / 24 VAC
<b>Response Time</b>	• 30 seconds for 63% Step
<b>Operating Temp</b>	• -10 to 160oF (-23.3 to 71oC)
<b>Operating RH</b>	• 0 to 100% RH
<b>RH Output</b>	• 0-10 VDC
<b>RH Accuracy @ 77oF</b>	• < +/- 3% RH nominal
<b>Interchangeability</b>	• Less than 2% RH Drift / 5 Years
<b>Long Term Stability</b>	• +/- 3% from 20-95% RH
<b>Saturated Response Time</b>	• 10 minutes for 63% Step
<b>Sensitivity</b>	• 0.1% RH
<b>Repeatability</b>	• 0.5% RH
<b>Hysteresis</b>	• Less than 0.4% RH
<b>Temperature Output</b>	• 10K Ohms @ 25oC (77oF)
<b>Temp. Sensor Accuracy</b>	• +/- 0.2oC from 0-70oC (32-158oF)
<b>Temp. Sensor Wire Colors</b>	• White / White
<b>Temp. Sensor Connections</b>	• Mate N Lock 2 pin Connector (FUTURE)

## Device Detail

### Dimensions



### Mounting Accessories (Included)



#### RH Wiring Diagram

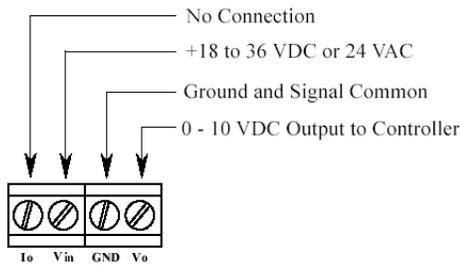


Figure A.

#### Temperature Sensor Connections

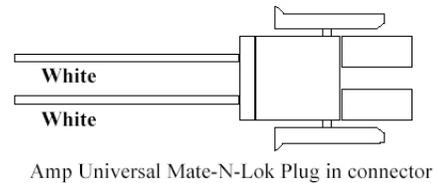


Figure B.

## Ordering Information

Model #	Description
L02-03-0101	RH Outdoor Humidity with a 10K Ohm Type III Thermistor