The SERIES RHP Temperature and Humidity Transmitter combine the voltage or current humidity transmitter output with a passive temperature thermistor or RTD output. Featuring polymer capacitance humidity sensors, models are available with 2%, 3%, or 5% accuracies. Duct mounted transmitters are available with an optional two-line alpha numeric LCD display.

**FEATURES/BENEFITS**
- 2%, 3%, or 5% accuracy models
- Optional LCD display on duct mount models
- Radiation shield option for outdoor installation in direct sunlight

**APPLICATIONS**
- Air economizers
- Outdoor temperature and relative humidity reference
- Pool room humidity monitoring

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**SPECIFICATIONS**

**Relative Humidity Range:** 0 to 100% RH.

**Temperature Range:** -40 to 140°F (-40 to 60°C).

**Accuracy, RH:** RHP-2XXX ±2% 10-90% RH @ 25°C; RHP-3XXX ±3% 20-80% RH @ 25°C; RHP-5XXX ±5% 20-80% RH @ 25°C.

**Accuracy, Thermistor Temp Sensor:** ±0.2°C @ 25°C (±0.36°F @ 77°F).

**Accuracy, RTD Temp Sensor:** DIN Class B; ±0.3°C @ 0°C (±0.54°F @ 32°F).

**Accuracy, Solid State Band Gap:** ±0.9°F @ 77°F (±0.3°C @ 25°C).

**Hysteresis:** ±1%.

**Repeatability:** ±0.1% typical.

**Temperature Limits:** -40 to 140°F (-40 to 60°C).

**Storage Temperature:** -40 to 176°F (-40 to 80°C).

**Compensated Temperature Range:** -4 to 140°F (-20 to 60°C).

**4 to 20 mA Loop Powered Models:** Power requirements: 10 to 35 VDC; Output signal: 4 to 20 mA.

**0-5/10V Output Models:** Power requirements: 15 to 35 VDC or 15 to 29 VAC; Output signal: 0 to 10 V @ 5 mA max.

**Solid State Band Gap Temperature Sensor Output Ranges:** Switch selectable, [ -20 to 140°F (-28.9 to 60°C); 0 to 100°F (-17.8 to 37.8°C); 40 to 90°F (4.4 to 32.3°C); -4 to 140°F (-20 to 60°C).]

**Response Time:** 15 seconds.

**Electrical Connections:** Removable screw terminal block.

**Drift:** < 1% RH/year.

**RH Sensor:** Capacitance polymer.

**Temperature Sensor:** Types 1, 2, 3: Solid state band gap; Curves A, B, C: Thermistor; Curves D, E: Platinum RTD DIN 385.

**Enclosure:** Duct mount: PBT; OSA: Polycarbonate.

**Enclosure Rating:** Duct mount: NEMA 4X (IP66) for housing only; OSA: NEMA 4X (IP66).

**Display:** Duct mount only, optional 2-line alpha numeric, 8 characters/line.

**Display Resolution:** RH: 0.1%; 0.1°F (0.1°C).

**Weight:** Duct mount: 0.616 lb (0.3 kg); OSA: 1 lb (0.45 kg).

**Agency Approvals:** CE.