The Series RHP Humidity/Temperature Transmitters combine the voltage or current humidity transmitter output with a passive temperature thermometer 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 output. Featuring polymer capacitance humidity sensors, models are available with current humidity transmitter output with a passive temperature thermistor or RTD.

**APPLICATIONS**
- Radiant heat
- Reduced system operating costs with radiation shield protecting the sensor from radiant heat
- Wide application environment from a large selection of temperature sensors and 2%, 3% and 5% accuracies

**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, Radiometer Solid Band Gap: ±0.1°F @ 25°C (±0.54°C @ 77°F);
- 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);
- Power Requirements: 4-20 mA loop powered models: 10-35 VDC; 0-5/10 V output models: 15-35 VDC or 10-29 VAC;
- Output Signal (Model Dependent): 4-20 mA; 0-5/10V at 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 s.
- Electrical Connections: Removable screw terminal block.
- Conduit Connection: Duct mount: 1/2˝ NPS; OSA: 1/2˝ (22.3 mm).
- 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 Material: Duct mount sensor tube: PVC-UL 94 V-0; Duct mount sensor housing and cover: Makrolon® polycarbonate-UL 94V-HB; OSA: Makrolon® polycarbonate-UL 94V-HB; 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: .616 lb (.283 kg); OSA: 1 lb (.45 kg).
- Agency Approvals: CE.