The Series RHP Humidity/Temperature Transmitters 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
- Optional LCD display on duct mount models

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

### 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:** Types 1, 2, 3: Solid state band gap; Curves A, B, C: Platinum RTD DIN 385
- **Accuracy, Solid State Band Gap:** ±0.2°C @ 25°C; RHP-5XXX ±5% 20-80% RH @ 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)
- **4-20 mA Loop Powered Models:** Power requirements: 10-35 VDC; Output signal: 0-10 V @ 5 mA max.
- **0-5/10 V Output Models:** Power requirements: 15-35 VDC or 15-29 VAC; Output signal: 0-10 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 s.
- **Duct mount: 1/2˝ NPS; OSA: 1/2˝ (22.3 mm).**
- **Conduit Connection:** Duct mount: 1/2˝ NPS; OSA: NEMA 4X for housing only; OSA: NEMA 4X (IP66).
- **RH Sensor:** Capacitance polymer.
- **Temperature Sensor:** Types 1, 2, 3: Solid state band gap; Curves A, B, C: 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.
- **Response Resolution:** RH: 0.1%, 0.1°F (0.1°C)
- **Weight:** Duct mount: 0.6 lb (.3 kg); OSA: 1 lb (.45 kg).
- **Agency Approvals:** CE.

### ACCESSORIES

- **Model**
  - A-RHP-FC
  - A-RHP-RT

- **Description**
  - Replacement plastic hydrophobic filter
  - Retrofit tool for fitting O-ring on RHP-D/M models for new filter
  - A-RHP-FC

- **Options**
  - LCD display
  - NIST traceable calibration certificate

- **Use OSA with sintered filter models when purchasing Series RHRS radiation shield separately.**