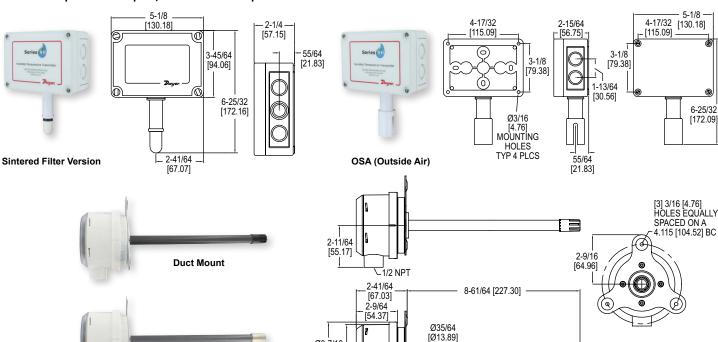


IDITY/TEMPERATURE TRANSMITTER

Passive Temperature Outputs, Sintered Filter Options



Ø3-7/16 [Ø87.31]

Ø3-11/64 [Ø80.57]

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.

Duct Sintered

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

MODEL CHART							
Example	RHP	-2	D	1	Α	-LCD	RHP-2D1A-LCD
Series	RHP						RH/passive temperature sensor transmitter
Accuracy		2 3 5					2% accuracy 3% accuracy 5% accuracy
Housing Type			D F M O S R				Duct mount w/ membrane filter Duct mount w/ SS sintered filter Duct mount w/ HDPE filter OSA (outside air) OSA w/sintered filter* Radiation shield
RH Output				1 2 3			4 to 20 mA 0 to 10 V 0 to 5 VDC
Temperature Sensor					0123ABCDEF		None 4 to 20 mA 0 to 10 VDC 0 to 5 VDC 10K @ 25°C thermistor type III 10K @ 25°C thermistor type III 3K @ 25°C thermistor 100 Ω RTD DIN 385 1K Ω RTD DIN 385 20K Ω @ 25°C thermistor
Options						LCD NIST	LCD display NIST traceable calibration certificate
*Use OSA with sintered filter models when purchasing Series RHRS							

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).

-RHP-XDXX

-RHP-XFXX

RHP-XMXX

8-61/64 [227.30]

9-3/32 [231.13]

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

0-5/10V Output Models: Power requirements: 15 to 35 VDC or 15 to 29 VAC;

0-5/10V Output Models: Power requirements: 15 to 35 VDC or 15 to 25 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.

Conduit Connection: Duct mount: 1/2" NPS; OSA: 1/2" (22.3 mm).

Conduit Connection: Duct mount: 1/2 NP3, 305. 1/2 (22.3 min).

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: .616 lb (.3 kg); OSA: 1 lb (.45 kg).

Agency Approvals: CE.

Warranty: 5 year limited warranty