

WALL MOUNT HUMIDITY/TEMPERATURE/DEW POINT TRANSMITTER

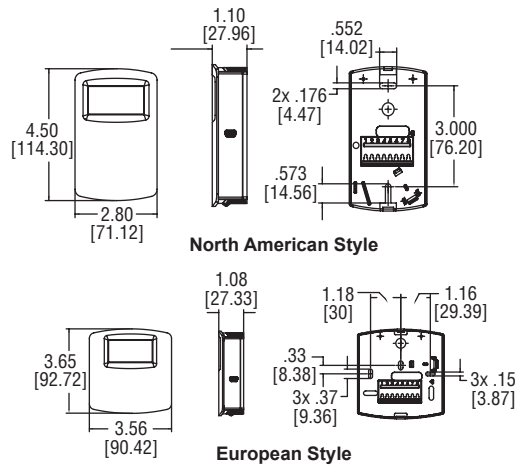
Optional LCD Display, Replaceable Sensors



European Style



North American Style



The **SERIES RHP-E/N** Wall Mount Humidity/Temperature/Dew Point Transmitter is the most versatile room transmitter on the market. The stylish housing is well vented to provide air flow across the sensor to improve measurement accuracy. The humidity and the dew point are measured using a capacitive polymer sensor that completely recovers from 100% saturation. The humidity and dew point can have either a current or voltage output, while the optional temperature output can be a current, voltage, RTD or thermistor. For models with current or voltage for the temperature output, the temperature range is field selectable.

FEATURES/BENEFITS

- Field selectable relative humidity or dew point output
- Field replaceable relative humidity and temperature sensor elements
- Universal analog outputs
- Integral or service tool LCD display options
- Two housing designs to match North American and European aesthetics

APPLICATIONS

- Air economizers
- Room comfort monitoring
- Greenhouse monitoring

MODEL CHART						
Example	RHP	-3	N	A	-LCD	RHP-3N4A-LCD
Series	RHP					Humidity/temperature/ Dew point transmitter
Accuracy		2 3 5				2% accuracy 3% accuracy 5% accuracy
Housing			E N			European style wall mount North American style wall mount
Humidity/ Dew Point Output				4		4-20 mA/0-5 VDC/0-10 VDC
Temperature Output					0 4 A B C D E F	None 4-20 mA/0-5 VDC/0-10 VDC 10K Ω @ 25°C thermistor type III 10K Ω @ 25°C thermistor type II 3K Ω @ 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

Ⓜ Items are net priced and are not subject to any discount.

SPECIFICATIONS

Relative Humidity Range: 0 to 100% RH.
Temperature Range: -40 to 140°F (-40 to 60°C) for thermistor and RTD sensors. -20 to 140°F (-28.9 to 60°C) for solid state band gap temperature sensors.
Dew Point Temperature Range: -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) field-selectable ranges.
Accuracy: RH: Model RHP-2XXX ±2% 10 to 90% RH @ 25°C; Model RHP-3XXX ±3% 20 to 80% RH @ 25°C; Model RHP-5XXX ±5% 20 to 80% RH @ 25°C; Thermistor temperature sensor: ±0.36°F @ 77°F (±0.2°C @ 25°C); RTD temperature sensor: DIN Class B; ±0.54°F @ 32°F (±0.3°C @ 0°C); Solid state band gap temperature sensor: ±0.9°F @ 77°F (±0.3°C @ 25°C).
Hysteresis: ±1%.
Repeatability: ±0.1% typical.
Temperature Limits: Operating: -40 to 140°F (-40 to 60°C); Storage: -40 to 176°F (-40 to 80°C).
Compensated Temperature Range: -4 to 140°F (-20 to 60°C).
4-20 mA Loop Powered Outputs: Power requirements: 10 to 35 VDC; Output signal: 4 to 20 mA, 2 channels for humidity/solid state temperature sensor models (loop powered on RH). Switch selectable RH/dew point. Switch selectable normal or reverse output.
0-5/10V Outputs: Power requirements: 15 to 35 VDC or 15 to 29 VAC; Output load: 5 mA max., 2 channels for humidity/solid state temperature sensor models. Switch selectable 0-10 V/2-10 V or 0-5 V/1-5 V output. Switch selectable RH/dew point. Switch selectable normal or reverse output.
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: Screw terminal block.
Drift: <1% RH/year.
RH Sensor: Capacitance polymer.
Enclosure Material: White polycarbonate (European); Warm gray polycarbonate (North American).
Enclosure Rating: IP20.
Display: Optional LCD; Switch selectable %RH or dew point, °F/°C.
Display Resolution: RH: 1%; Temperature: 0.1°F (0.1°C); Dew Point: 1°F (1°C).
Weight: 4.4 oz (125 g).
Agency Approvals: CE.

ACCESSORIES

Model	Description
A-449	Remote LCD display allows remote indication of select Dwyer wall mount transmitters for validation or certification purposes
SCD-PS	100-240 VAC/VDC to 24 VDC power supply



A-449

Humidity/Temperature Transmitters