Dwyer

SERIES RHP-E/N

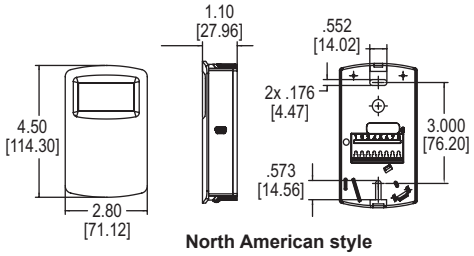
WALL MOUNT HUMIDITY/TEMPERATURE/DEW POINT TRANSMITTERS

Optional LCD Display

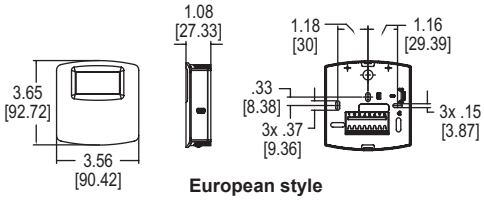
CALIBRATION SERVICES AVAILABLE

European style

North American style



North American style



European style

The **Series RHP-E/N Wall Mount Humidity/Temperature/Dew Point Transmitters** are 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. 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
- 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

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 to 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 s.
Electrical Connections: Screw terminal block.
Drift: <1% RH/year.
RH Sensor: Capacitance polymer.
Enclosure Material: Polycarbonate.
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.

MODEL CHART

Example	RHP	-3	N	4	A	-LCD	RHP-3N4A-LCD	Price
Series	RHP						Humidity/temperaturedew point transmitter	-
Accuracy		2					2% accuracy	+$29.25
		3					3% accuracy	+18.75
		5					5% accuracy	-
Housing			E				European style wall mount	77.50
			N				North American style wall mount	77.50
Humidity/Dew Point Output				4			4 to 20 mA/0 to 5 VDC/0 to 10 VDC	-
Temperature Output					0		None	-
					4		4 to 20 mA/0 to 5 VDC/0 to 10 VDC	+10.00
					A		10K Ω @ 25°C thermistor type III	+5.00
					B		10K Ω @ 25°C thermistor type II	+5.00
					C		3K Ω @ 25°C thermistor	+6.00
					D		100 Ω RTD DIN 385	+6.00
					E		1K Ω RTD DIN 385	+6.00
					F		20K Ω @ 25°C thermistor	+5.00
Options						LCD	LCD display	+50.00
						NIST	NIST traceable calibration certificate	+121.00Ⓝ

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

ACCESSORIES

Model	Description	Price
A-449	Remote LCD display allows remote indication of select Dwyer wall mount transmitters for validation or certification purposes	**$50.00**
SCD-PS	100 to 240 VAC/VDC to 24 VDC power supply	**30.00**Ⓑ

Ⓑ Items are subject to Schedule B discounts.

A-449

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