WALL MOUNT HUMIDITY/TEMPERATURE/DEW POINT TRANSITTERS

Optional LCD Display

The Series RHP-E/N Wall Mount Humidity/Thermperatur/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); 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 43870 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: ±0.8%.
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: 10-35 VDC; Output signal: 4-20 mA; 2 channels for humidity/solid state temperature sensor models. Switch selectable, -20 to 140°F (-28.9 to 60°C); Storage: -40 to 90°F (4.4 to 32.3°C); -4 to 140°F (-20 to 60°C).

Dew Point Temperature Range: 0 to 5°C accuracy
RH/dew point. Switch selectable normal (loop powered on RH). 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 (-20 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: 8 s.

Electrical Connections: Screw terminal block.
Drift: ±0.25% RH/year.
RH Sensor: Capacitance polymer.
Enclosure Material: Polycarbonate.
Display: Optional LCD; Switch selectable %RH or dew point, °F/°C.

Accessories:
- Remote LCD display allows remote indication of select Dwyer wall mount transmitters for validation or certification purposes.
- SCD-PS-100-240 VAC/VDC-24 VDC power supply.

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SERIES RHP-E/N

Optional LCD Display

CALIBRATION SERVICES AVAILABLE

DWYER INSTRUMENTS, INC. | dwyer-inst.com

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