Humidity/Temperature Transmitter

Passive Temperature Outputs, Sintered Filter Options



Models Select Chart

EXAMPLE	RHP	2	D	1	A	LCD	RHP-2D1A-LCD RH/Passive Temperature Sensor Transmitter, 2% accuracy, duct mount with plastic tip, 4- 20 mA RH output, 10K @ 25°C thermistor (Type III), with LCD display.
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/Sintered Filter (no longer available, use the M option) 40 Micron Filter HDPE OSA (Outside Air) OSA w/Sintered Filter OSA w/Sintered Filter and Radiation Shield
RH OUTPUT				1 2 3			4-20 mA 0-10 Volts 0-5 Volts
TEMPERATURE SENSOR					0 1 2 3 A B C D E F		None 4-20 mA 0-10 Volts 0-5 Volts 10K @ 25°C Thermistor (Type III) 10K @ 25°C Thermistor (Type II) 3K @ 25°C Thermistor 100Ω RTD DIN 385 1KΩ RTD DIN 385 20KΩ @ 25°C Thermistor
OPTIONS						LCD NIST	LCD Display NIST Calibration

Accessories

Model	Description
A-452	Sintered filter, 1/4 NPSM.
A-453	Filter cap, 1/4 NPSM.
RHRS	6 plate solar radiation shield for sintered filter
	version RH transmitters.

Specifications:-		
Relative Humidity Range	:	0 to 100% RH.
Temperature Range	:	-40 to 140°F (-40 to 60°C)
Accuracy, RH	:	RHP-2XXX ±2% 10 to 90% RH @ 25°C;RHP-
		3XXX ±3% 20 to 80% RH @ 25°C;RHP-5XXX
		±5% 20 to 80% RH @ 25°C.
Accuracy, Thermistor	:	±0.2°C @ 25°C (±0.36°F @ 77°F).
Temp Sensor		
Accuracy, RTD Temp		DIN Class B; ±0.3°C @ 0°C (±0.54°F @ 32°F).
Sensor		
Accuracy, Solid State		±0.9°F @ 77°F (±0.3°C @ 25°C).
Band Gap		
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	:	-4 to 140°F (-20 to 60°C).
Temperature Range		
4-20 mA Loop Powered	:	Power requirements: 10 to 35 VDC; Output signal:
Outputs		4 to 20 mA.
0-5/10V Outputs	:	Power requirements: 15 to 35 VDC or 15 to 29
		VAC; Output signal: 0 to 10 V @ 5 mA max.
Solid State Band Gap	:	Switch selectable, -20 to $140^{\circ}F$ (-28.9 to $60^{\circ}C$); 0
Temp Sensor Output		to 100°F (-17.8 to 37.8°C); 40 to 90°F (4.4 to
Ranges		32.3°C); -4 to 140°F (-20 to 60°C).
Response Time	:	15 s.
Electrical Connections	:	Removable screw terminal block.
Conduit Connection	:	Duct Mount: 1/2" NPS; OSA: 1/2" (22.3 mm).
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. (See R-T
		Lookup Table).

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.