OMICRON

H4
HUMIDITY TRANSMITTER

Separate Probe Humidity & Temperature Transmitter

Applications:

Omicron humidity and temperature transmitters are designed for environment monitoring and controlling in industrial and commercial buildings. These transmitters can be used for:

- Humidity and temperature monitoring of supply, exhaust and return air
- Humidity and temperature monitoring in critical environment such as outside air
- Other applications of immersion humidity and temperature monitoring

Features:

- High performance digital sensors and circuits, ensure accurate measurement and temperature compensation
- Good long term stability and reliability
- 100% field changeable sensors, no re-calibration needed
- Fast response
- Digital technology applied, multiple output optional, over voltage and reverse polarity protection, high reliability and interference capability
- Industrial design, SS probe and selectable filter
- High protection rate up to IP65

Specifications:

Relative Humidity

Sensor	:	Digital polymer
Range	:	0~100%RH
Output	:	4~20mA(2 wires), 0~10VDC(3 wires), RS485
Accuracy	:	1.6 / 2.0 / 3 / 4.5 %RH(25°C,20~80%RH)
Hysteresis	:	<±1%RH
Response time	:	<10s(25°C,in slow air)
Drift	:	<±0.5%RH/year

Temperature

Sensor	:	Solid state band gap, RTD or thermistor
Range	:	0~50°C,0~100°C, -40~60, or others (transmitter)
Output	:	4~20mA(2 wires) ,0~10VDC(3 wires),RS485, or RTD, thermistor
Accuracy	:	see model table
Power	:	Current 7.5~36VDC, Voltage & Other 15~35VAC/DC
Output Load	:	<600Ω (current), >2KΩ (voltage)
Temperature Limit	:	-40~85°C,0~95%RH(Non condensing)
Storage Temperature	:	-40~80°C
Housing	:	Fireproof ABS Enclosure, SS probe, SS mesh filter or sintered filter
Protection	:	IP65

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Optional MMI operation panel:

Including LCD, integrated with function keys, can be ordered and operated in field separately. See details on MMI product

Models:

Code		Descriptions
H4	:	Separate Probe Temp./RH transmitter

Code		RH Accuracy
1	:	±1.6%RH
2	:	±2.0%RH
3	:	±3.0%RH
5	:	±4.5%RH

Code		RH Output (0-100%RH)
1	:	0-10VDC(3 wires)
2	:	4-20mA(2 wires)
8	:	RS485, Modbus

Code		Temperature Output
0	:	No
1	:	0-10VDC(3 wires)
2	:	4-20mA(2 wires)
3	:	PT1000, ±0.2°C@25°C
4	:	PT100, ±0.2°C@25°C
5	:	NTC20K, ±0.4°C@25°C
6	:	Ni 1000, ±0.4°C@25°C
7	:	NTC10K-II, ±0.4°C@25°C
8	:	RS485, Modbus
9	:	NTC10K-III, ±0.4°C@25°C
A	:	NTC10K-A, ±0.4°C@25°C

Code		Temperature Range
0	:	No
1	:	0-50°C
2	:	0-100°C
3	:	-40-60°C
7	:	others

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Models:

Code	Filter
0	: SS mesh
1	: SS sintered

Dimension (mm):

*H series products are powered on RH circuit, so the RH circuit must be powered. Otherwise it could not work.

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