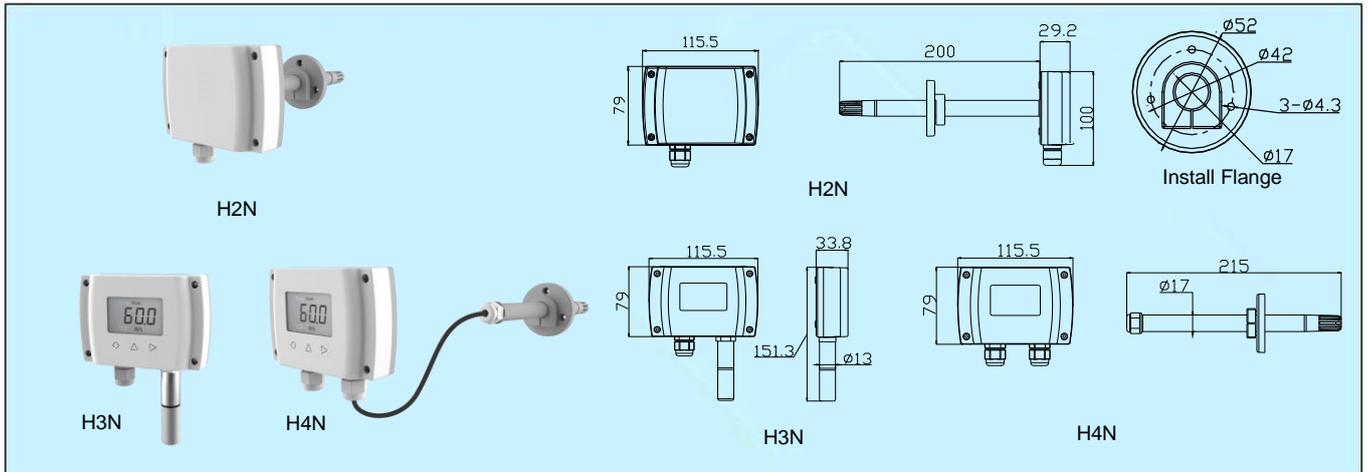


H2,3,4N Temperature & Humidity Transmitter



Applications & Features

- Humidity and temperature transmitters H2N (duct), H3N(outside) and H4N(remote) are designed for environment monitoring and controlling in industrial and commercial buildings.
- High performance digital sensors and circuits, ensure accurate measurement and temperature compensation
- Digital technology applied, multiple outputs optional, over voltage and reverse polarity protection, high reliability and anti-interference capability
- LCD display temperature and humidity alternatively
- LCD & function keys can set parameters and calibrate output, so the product can be a stand alone controller
- Good long term stability and reliability
- 100% field changeable sensor without re-calibration
- Fast response
- High protection rate up to IP65

Specifications

Relative Humidity

Sensor: Digital polymer
Range: 0~100%RH
Output: see models
Accuracy: 2%, 3%, (25°C, 20~80%RH)
Hysteresis: <±1%RH
Response time: <10s (25°C, in slow air)
Drift: <±0.5%RH / year

Temperature

Sensor: Digital temperature sensor or RTD/thermistors
Range: 0~50°C, 0~100°C, -40~60°C, or others
Output: see models
Accuracy: transmitter: ≤±0.4°C @ 5~60°C or 0.3°C @ 5~60°C
 RTD or thermistor: typical 0.2~0.4°C @ 25°C, see models

Power: Current: 18.5~35VDC (R_{load}=500Ω)
 8.5~35VDC (R_{load}=0Ω)
 Voltage: 16~28VAC/ 16~35VDC

Output Load: ≤500Ω (current), ≥2KΩ (voltage)

Relay output: 2×SPST, 3A/30VDC, 3A/250VAC

Display and keys: 4 digits LCD, with unit indication, backlight (4-20mA N/A), 3 touch keys, see more details on LCD & Keys operation

Work Temp.: -30~70°C(LCD:0~50°C)
 5~95%RH (Non condensing)

Housing: Fireproof ABS housing, UHMW-PE filter(H2/H4N), SS probe and sintered filter(H3N)

Protection: IP65

Weight: H2N:360g;H3N:270g;H4N:430g

Approval: CE

Models

Model	H2N							Duct mount Temp./RH transmitter
	H3N							Outside air Temp./RH transmitter
	H4N							Remote mount Temp./RH transmitter
RH Accuracy		2						±2%RH(0.3°C)
		3						±3%RH(0.4°C)
RH Output			1					0-10VDC(3 wires)
			2					4-20mA(2 wires)
			8					RS485/Modbus
Temp. 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
Temp. Range					0			No
					1			0-50°C
					2			0-100°C
					3			-40-60°C
					7			others
Relay						0		No
						1		2×SPST(4-20mA N/A)
LCD & Keys							0	No
							1	LCD
							2	LCD & Keys

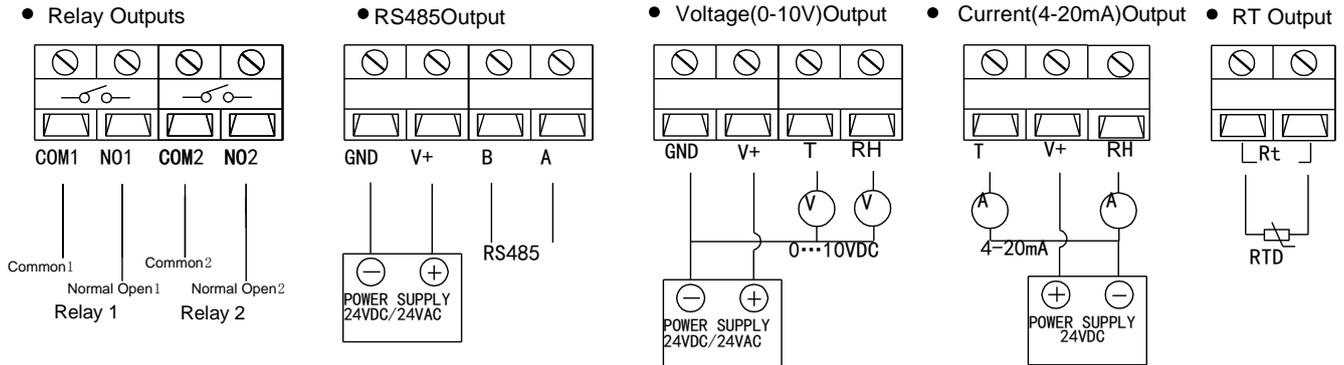
*1. H2,3,4N series current products are powered by RH circuit, so the RH circuit must be powered. Otherwise it could not work.

*2. Only when the temperature output is 1 or 2, the temperature range 1-7 is applicable. Otherwise, always use 0 as temperature range selection.

*3. See resistance table on page 1 of this catalog.

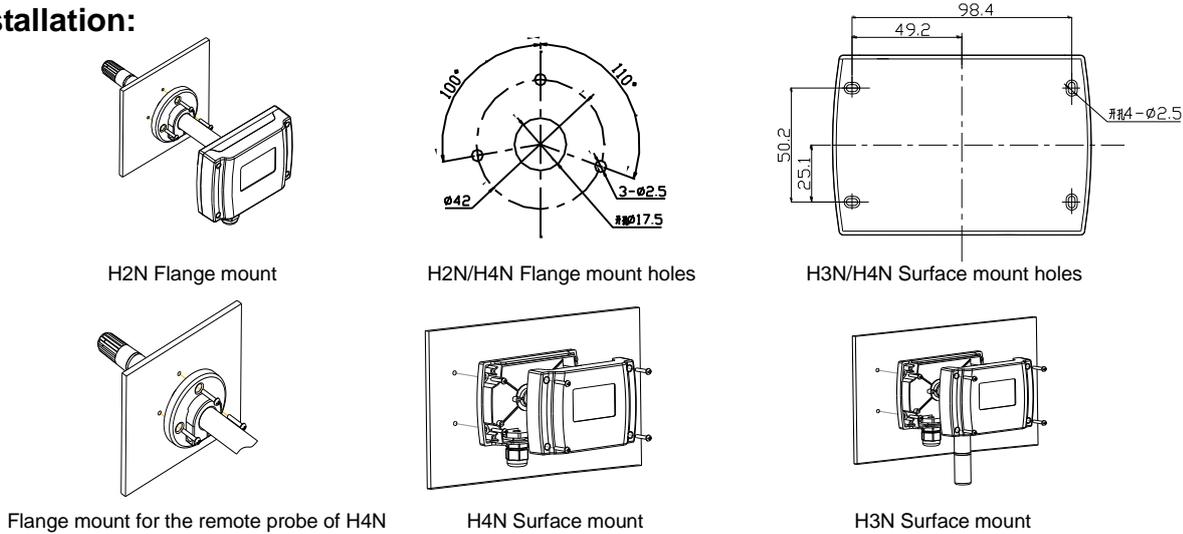
Connection:

Different models have different electrical terminals. Please wire specific model according to the wiring diagram inside the front cover.



*Current 4-20mA Output: terminal RH loop should be connected, otherwise the transmitter can not work.

Installation:



- The install flange kit is recommended for installing the H2N. The depth being inserted can be adjusted. Install the kit on the duct with 3 screws, and use another screw to tighten the probe and the whole H2N. the duct hole(φ17.5mm) should be air-tight after installation.
- H3/4N's housing should be installed vertically on the wall, with the sensor probe downward. It should be far away from any heat/cool sources. If needed, there should be a shield to prevent the sensor from direct sun light and rain. Drill 4 holes on the wall according to the dimensions. Install the H3/4N base with the 4 screws after remove the front cover. H4N's remote probe can also be installed with flange kit, same as H2N.
- Open the front cover, install the drain on the base and take the wires from DDC/PLC, etc. into the base through the drain, then finish wiring according to the diagram inside the cover and restore the front cover. Make sure to install the drain with the base and the base with the front cover all completely air-tight (there are two seal rings between the drain and the base, and the front cover and the base), to prove the whole housing can meet up to IP65.

Attention:

It should be power OFF during installing and wiring. When using 24VAC, it is strongly recommended to power the unit with independent transformer. If sharing a 24VAC transformer with other equipments such as controllers, transmitters or actuators, please make sure the terminals 24V and GND are connected correctly. Otherwise, it will perhaps reduce serious damages.

Warranty:

- It has limited warranty for eighteen (18) months after the production date.
- It does not extend to any unit that has been subjected to misuse or accident.
- It is, in any event, strictly limited to the replacement or repair of the product itself.



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