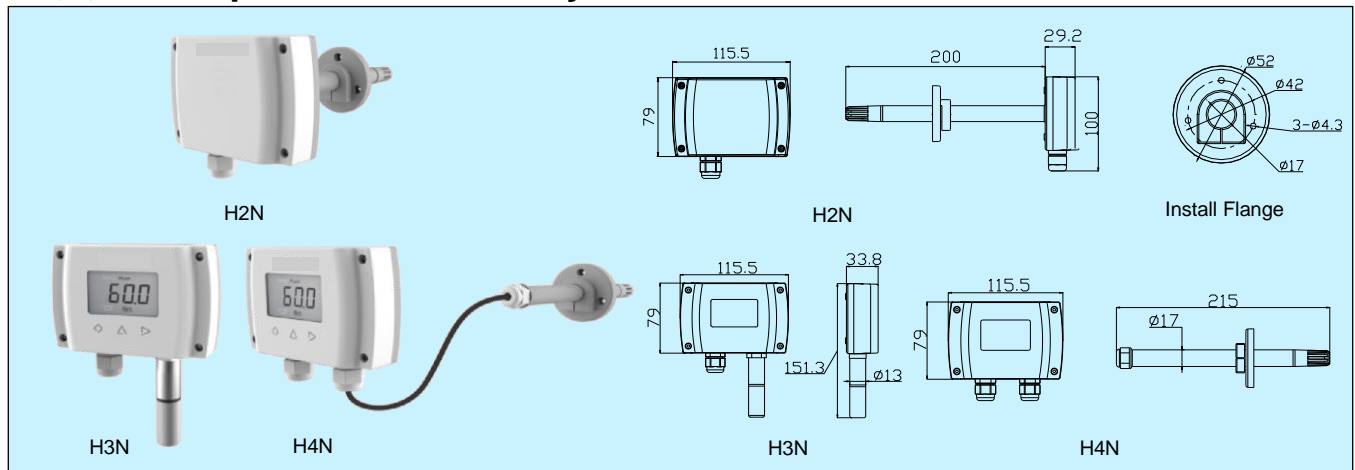


## H2,3,4N Temperature & Humidity Transmitter



## 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:**  $< \pm 1\% \text{RH}$

**Response time:** <10s (25°C, in slow air)

**Drift:**  $< \pm 0.5\% \text{RH} / \text{year}$

## Temperature

**Sensor:** Digital temperature sensor or RTD/thermistor

**Range:** 0~50°C, 0~100°C, -40~60°C, or others

**Output:** 4~20mA (2wires), 0~10VDC (3wires), RS485/Modbus, or RTD/thermistor: see Models and resistance table

**Accuracy:** transmitter:  $\leq \pm 0.4^{\circ}\text{C}$  @ 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 ( $R_L=500\Omega$ ); 8.5~35VDC ( $R_L=0\Omega$ )  
Voltage: 16~28VAC/ 16~35VDC

**Output Load:**  $\leq 500\Omega$  (current),  $\geq 2K\Omega$  (voltage)

**Relay output:** 2xSPST, 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 cond.)

**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

<b>Model</b>	H2N						Duct mount Temp./RH transmitter
	H3N						Outside air Temp./RH transmitter
	H4N						Remote mount Temp./ RH transmitter
<b>RH Accuracy</b>		2 3					±2%RH(0.3°C ) ±3%RH(0.4°C )
<b>RH Output</b>			1 2 8				0~10VDC(3 wires) 4~20mA(2 wires) RS485/Modbus
<b>Temp. Output</b>				0 1 2 3 4 5 6 7 8 9 A			No 0~10VDC(3 wires) 4~20mA(2 wires) PT1000, ±0.2°C@25°C PT100, ±0.2°C@25°C NTC20K,±0.4°C@25°C Ni 1000, ±0.4°C@25°C NTC10K-II, 0.4°C@25°C RS485/Modbus NTC10K-III,0.4°C@25°C NTC10K-A, 0.4°C@25°C
<b>Temp. Range</b>				0 1 2 3 7			No 0~50°C 0~100°C -40~60°C others
<b>Relay</b>					0 1		No 2× SPST(4-20mA N/A)
<b>LCD &amp; Keys</b>						0 1 2	No LCD 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.