

H1N Room Temperature & Humidity Transmitter



Applications & Features

- Apply for indoor air T/RH measurement with good performance digital sensor & circuit. The sensor is 100% field changeable without re-calibration
- Good long term stability, reliability and fast response
- State of art housing. All electrical terminals are on the inside bottom, avoid any possible destroy to PCB when wiring
- Multiple outputs optional, over voltage and reverse polarity protection, and good anti-interference capability
- LCD & function keys can set parameters and calibrate output, so the product can be a stand alone controller

Specifications

Relative Humidity

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

Temperature

Sensor: Digital, RTD or thermistor, see models
Range: 0~50°C
Output: see Models
Accuracy: transmitter: <±0.4°C(0.3°C) @ 5~60°C, see models
Power: Current: 18.5~35VDC (R_L=500Ω); 8.5~35VDC (R_L=0Ω)
 Voltage: 16~28VAC/ 16~35VDC

Output Load: ≤500Ω (current), ≥2KΩ (voltage)
Relay output: 2xSPST, 3A/30VDC, 3A/250VAC
Display and Keys: 4 bits LCD, with unit indication, backlight (4~20mA N/A), 3 keys, see details on LCD & Keys operation
Display Resolution: 0.1°C, 0.1%RH
Temp. Limit: -20~70°C, 5~95%RH (Non cond.)
Storage Temperature: -20~80°C

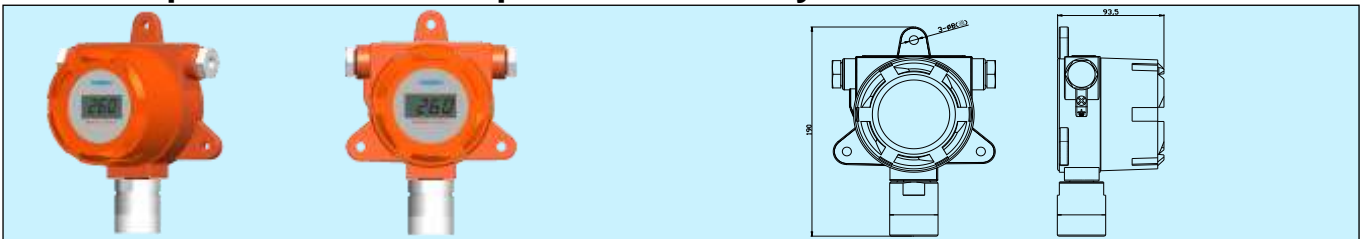
Housing: fire retardant PC(UL94V-0), **Protection:** IP30
Weight: 110g **Approval:** CE

Models

Model	H1N					Room T/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
	0					No
Temp. Output	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, ±0.2°C@25°C
	6					Ni 1000, ±0.5°C@25°C
	7					NTC10K-II, 0.2°C@25°C
	8					RS485/Modbus
	9					NTC10K-III, 0.3°C@25°C
	A					NTC10K-A, 0.3°C@25°C
Temp. Range				0		No
				1		0~50°C
				7		others
Relay				0		No
				1		2xSPST (4~20mA N/A)
LCD & Keys					0	No
					1	LCD
					2	LCD & Keys

1. Current output products are powered on RH circuit, so RH circuit must be powered.
2. When temp. output is 1 or 2, the range 1-7 is applicable. Otherwise, always use 0.
3. See resistance table on page 1 of this catalog.

H3Ex Explosion-Proof Temperature/Humidity Transmitter



Applications & Features

- T/RH measurement in harsh and combustible, explosive or toxic areas. Moisture and corrosion resistant, IP66
- Industrial die cast aluminum housing, with the sensor placed in the separated metal chamber, ensure electrically isolated. The sensor assembly is easy to maintain or replace
- High-performance temperature/humidity sensor and circuit, accurate measurement and compensation, high accuracy, fast response, good long-term stability
- Meet Explosion Proof standards GB 3836.1-2010 and GB 3836.2-2010 with certificate Exd II CT6Gb. Suitable for Zone 1 & 2 hazardous areas where there are explosive mixtures of IIA, IIB, IIC, T1-T6 combustible gas, vapor and air

Specifications

	Hum.	Temp.
Range	0~100%RH	0~50°C etc.
Accuracy	Typ. 3%@25°C, 20~80%RH	Typ. ±0.5°C@ 0~50°C
Hys. & Rep.	<±0.8%RH@ 25°C	±0.1°C
Response	<60s(25°C, in slow air)	<3min
Drift	<±0.25%RH/year	<±0.1°C /year

Sensor: High precision digital sensor
Power: 18.5~35VDC
Output: 2x 4~20mA (3 wires), RS485/Modbus
Range: humidity 0~100%RH; temperature 0~50(default)/100/-20~80/-40~60°C, selected by switch
Load: ≤500Ω (4~20mA)
Display: LCD, with backlight
Operating condition: -20~60°C, 5~95%RH(Non-cond.)
Housing: die cast aluminum housing, SS probe and SS mesh filter
Protection: IP66
Approval: CE, Exd II CT6Gb, EMC(2014/30/EU, EN50270)
Weight: 1.8kg

Models

Model	H3Ex	Ex-proof Temp./Hum. Transmitter
Output	2	2 x 4~20mA(3 wires)
	8	RS485/Modbus