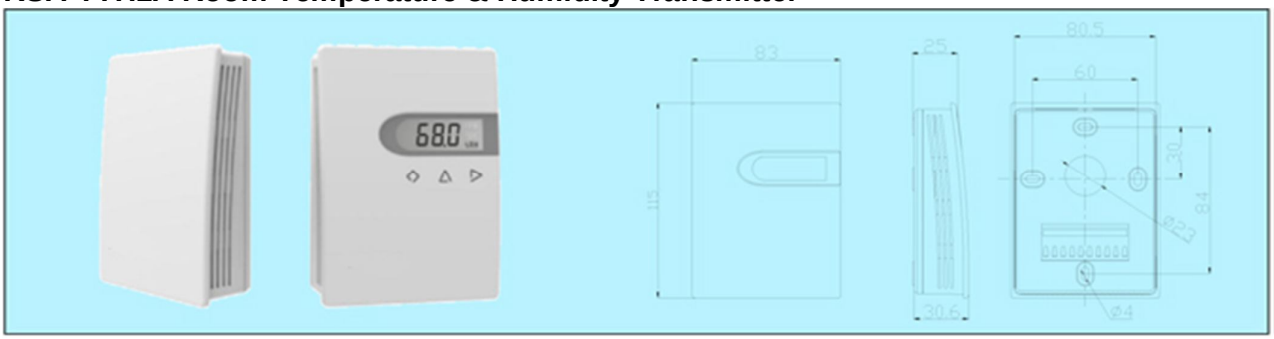
RSA-TTH1A Room Temperature & Humidity Transmitter



Applications & Features

- It is designed for indoor air temperature and humidity measurement
- High performance digital sensors & circuits, ensure accurate measurement & temp. compensation
- Good long term stability and reliability
- 100% changeable sensors without re-calibration
- Fast response
- State of art housing design, easy installation & wiring
- All electrical terminals are on the inside bottom, avoid any possible destroy to PCB when wiring
- 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

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: 4~20mA (2wires), 0~10VDC (3wires), RS485/Modbus, or RTD/thermistor: see Models and resistance table
Accuracy: transmitter: <±0.4°C(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=500Ω); 8.5~35VDC (R_L=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 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: ABS+PC
Protection: IP30
Weight: 110g
Approval: CE

Models

Model	RSA-TTH1A							Room Temp./RH transmitter
RH Accuracy		2 3						±2%RH(0.3°C) ±3%RH(0.4°C)
RH Output			1 2 8					0~10VDC(3 wires) 4~20mA(2 wires) RS485/Modbus
Temp. Output				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
Temp. Range					0 1 7			No 0~50°C others
Relay						0 1		No 2×SPST(4-20mA N/ A)
LCD& Keys							0 1 2	No LCD LCD & Keys

1. RSA-TTH1Aseries current products are powered on 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.