

THP/TH9 SERIES

Temperature / Humidity Transmitter

Wall Mounting and Duct Mounting CE-Approval

Features

- ◆ Designed for detection and output relative humidity and temperature with high accuracy
- External sensors design let the measurements more accurate, no influence from components heating
- ◆ Combined both humidity and temperature sensors seamlessly with the digital auto compensation
- Outside sensing probe with more accuracy and convenient usage
- Special white backlit LCD can be selected with displaying both actual temperature and humidity
- Smart structure for easy mounting and disassembly
- Attractive appearance for different application places
- Temperature and humidity fully calibration
- Very easy mounting and maintenance, two lengths selectable for the sensor probe
- ◆ Provide two linear analog outputs for humidity and temperature measurements
- ◆ Modbus RS485 communication
- ◆ CE-Approval

Typical Applications

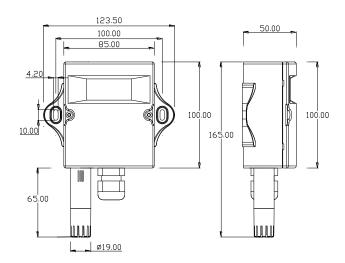
- ♦ High end HVAC
- Clean rooms
- Green houses
- Stocks
- Other places where need to measure temperature and humidity

Specifications

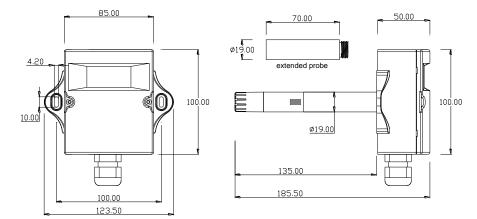
	Temperature	Relative Humidity	
Accuracy	±0.4°C @20°C	±3%RH (20%-80%RH)	
Measuring range	0℃~50℃(32°F~122°F) (default)	0 -100%RH	
Display resolution	0.1℃	0.1%RH	
Stability	±0.1℃	±1%RH per year	
storage environment	10℃-50℃, 20%RH~60%RH		
Output	2X0~10VDC(default) or 2X 4~20mA (selectable by jumpers) 2X 0~5VDC (selected at place orders)		
RS485 interface(optional)	Modbus RS485 interface		
Power supply	24 VDC/24V AC ±20%		
Power cost	≤1.6W		
Permissible load	Max. 500Ω (4~20mA)		
Connection	Screw terminals/ wire diameter:1.5mm ²		
Housing/ Protection class	PC/ABS fireproof material IP40 class / IP54 for requested models		
Dimension	THP Wall-mounting series: 85(W)X100(H)X50(D)mm+65mm(external probe)X∅19.0mm		
	TH9 Duct-mounting series: 85(W)X100(H)X50(D)mm +135mm(duct probe) X∅19.0mm		
Net weight	THP Wall-mounting series: 280g		
	TH9 Duct-mounting series: 290g		

Dimensions & Mounting

THP Series-Wall mounting

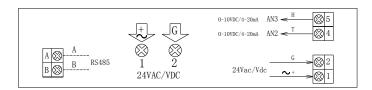






TH9 Series-Duct mounting

Wiring Diagrams



Models Information

Product Type	Model Name	Description
Wall Mounting (with adown external sensor probe) No LCD	THP110/120/130	2X 0~10VDC/ 2X 4~20mA/ 2x 0~5VDC linear outputs for temperature and humidity measurements. No LCD display.
	THP111/121/131	2X 0~10VDC/ 2X 4~20mA/ 2x 0~5VDC linear outputs for temperature and humidity measurements. Modbus RS485 interface. No LCD display.
	THP101	Modbus RS485 protocol for temperature and humidity measurements. No LCD display.
Wall Mounting (with adown external sensor probe) LCD Display	THP201	Modbus RS485 protocol for temperature and humidity measurements. LCD display temperature & humidity.
	THP210/220/230	2X 0~10VDC/ 2X 4~20mA/ 2x 0~5VDC linear outputs for temperature and humidity measurements. LCD display temperature & humidity.
	THP211/221/231	2X 0~10VDC/ 2X 4~20mA/ 2x 0~5VDC linear outputs for temperature and humidity measurements. Modbus RS485 interface. LCD display temperature & humidity.
Duct Probe Type No LCD	TH9110/120/130	Duct probe type with 2X 0~10VDC/ 2X 4~20mA/ 2x 0~5VDC linear outputs for temperature and humidity measurements. No LCD display.
	TH9111/121/131	Duct probe type with 2X 0~10VDC/ 2X 4~20mA/ 2x 0~5VDC linear outputs for temperature and humidity measurements. Modbus RS485 interface. No LCD display.
	TH9101	Duct type type with Modbus RS485 interface.
Duct Mounting With LCD	TH9201	Duct probe type with a Modbus RS485 interface. LCD display temperature & humidity
	TH9210/220/230	Duct probe type with 2X 0~10VDC/ 2X 4~20mA/ 2x 0~5VDC linear outputs for temperature and humidity measurements. LCD display temperature & humidity



TH9211/221/231	Duct probe type with 2X 0~10VDC/ 2X 4~20mA/2x 0~5VDC linear
	outputs for temperature and humidity measurements. Modbus RS485
	interface.LCD display temperature & humidity

Postfix 1: temperature scaling (non requested option)

T05: $0^{\circ} \sim 50^{\circ} (32^{\circ} \approx 122^{\circ})$ default (no the option means the default)

T06: 0°C~60°C(32°F~140°F) **T26**: -20°C~60°C(-4°F~140°F)

Postfix 2: IP54 class (non requested option)

Just for models without LCD.

No the option means the housing is IP40 class

Postfix 3: extended probe of TH9 (non requested option)

1: the probe length is added to 135+70mm

2: the probe length is added to 135+140mm

No the option means the probe length is 135mm

For example: **THP201-T0050** indicates the wall mounting transmitter with Modbus RS485 interface for temperature and humidity measurements. LCD display temperature & humidity. The temperature range is 0° C ~50°C.

TH9211-1 indicates the duct type transmitter with Modbus RS485 interface. LCD display temperature & humidity. The temperature scaling is -20~60°C. The duct probe length is extended to 135+70mm