Temperature & Humidity Transmitter

Applications

- HVAC systems
- Clean rooms
- Green houses
- Mushrooms, stocks
- Workshops, stores
- Other places where need to measure temperature and humidity

Product No: THP/TH9 Series

Wall Mounting and Duct Mounting

Features

- Designed for detection and output relative humidity and temperature with high accuracy
- External sensors probe design let the measurements more accurate with reduction influence from inside heating
- Combined both humidity and temperature sensors seamlessly with the digital auto compensation
- Outside sensing probe with more accuracy and convenient usage
- Two linear analog outputs and Modbus RS485 communication
- Smart structure for easy mounting and disassembly, two lengths selectable for the sensor probe
- CE-Approval

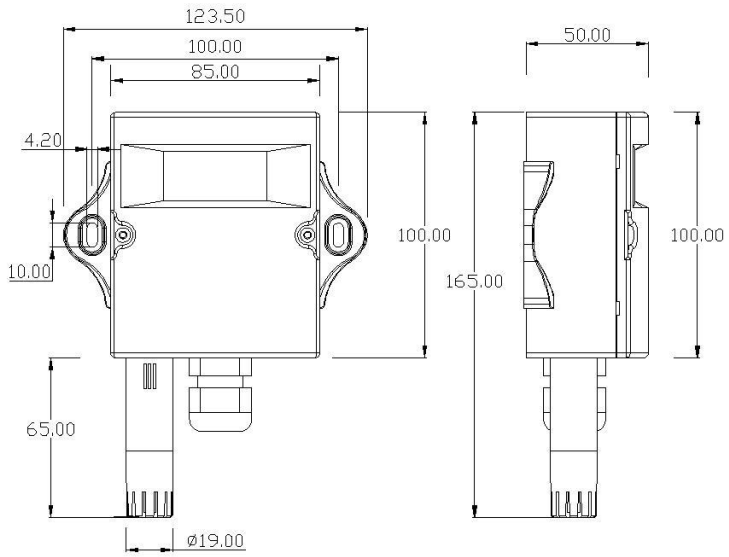
Typical Applications

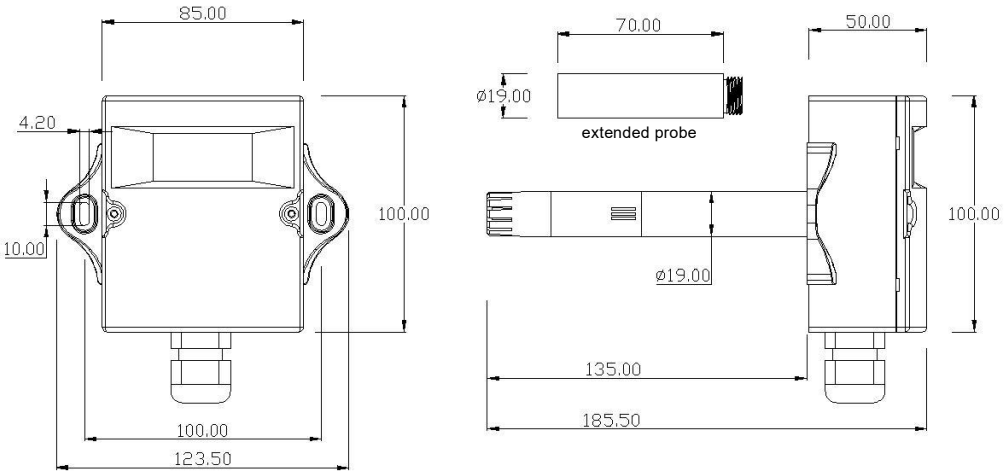
- HVAC systems
- Clean rooms
- Green houses
- Mushrooms, stocks
- Workshops, stores
- Other places where need to measure temperature and humidity

Specifications

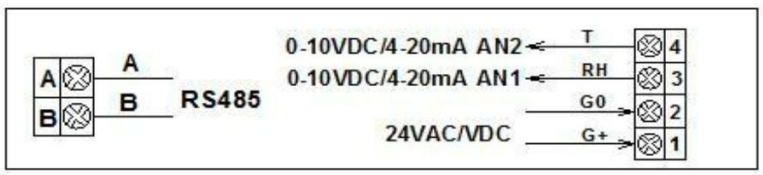
	Temperature	Relative Humidity
Accuracy	±0.4℃ @20℃	±3%RH (20%-80%RH)
Measuring range	0℃~50℃(32℉~122℉) (default)	0 -100%RH
Display resolution	0.1℃	0.1%RH
Stability	<0.15℃ per year	<0.5%RH per year
storage environment	10℃-50℃, 20%RH~60%RH	
Output	2X0~10VDC(default) or 2X 4~20mA (selectable by jumpers) 2X 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 IP50 (default), IP54 is optional for some 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





Wiring Diagrams



Model 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

There are below postfixes selectable for above models.

Postfix 1: temperature scaling (non requested option)

T05: 0℃~50℃(32℉~122℉) (default)

T06: 0℃~60℃(32℉~140℉)

T26: -20℃~60℃(-4℉~140℉)

Postfix 2: IP54 class

Only for models without LCD.

No the option means the housing is IP50 class

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

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

No the option means the probe length is 135mm (default)

For example: **THP201-T05** indicates the wall mounting transmitter with Modbus RS485 interface for temperature and humidity measurements. LCD display temperature & humidity. The temperature range is 0℃~50℃.