



## THP/TH9 SERIES

**Temperature / Humidity Transmitter**  
**Wall Mounting and Duct Mounting**  
**CE-Approval**

### Features

- ◆ Designed for detection and output of relative humidity and temperature with high accuracy
- ◆ External sensors design allows the measurements be more accurate, no influence from components heating
- ◆ Combines 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 displaying both actual temperature and humidity
- ◆ Smart structure for easy mounting and disassembly
- ◆ Attractive appearance for different application places
- ◆ Temperature and humidity full calibration
- ◆ Very easy mounting and maintenance, two lengths selectable for the sensor probe
- ◆ Provides two linear analog outputs for humidity and temperature measurements
- ◆ Modbus RS485 communication
- ◆ CE-Approval

### Typical Applications

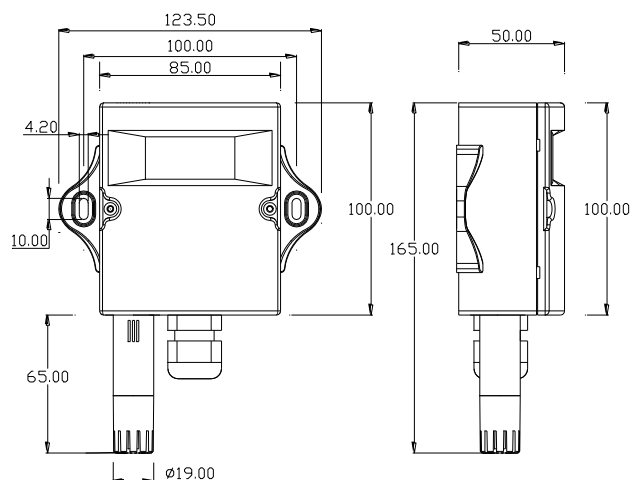
- ◆ High end HVAC
- ◆ Clean rooms
- ◆ Green houses
- ◆ Stock rooms, warehouses
- ◆ Other places where you need to measure temperature and humidity

## Specifications

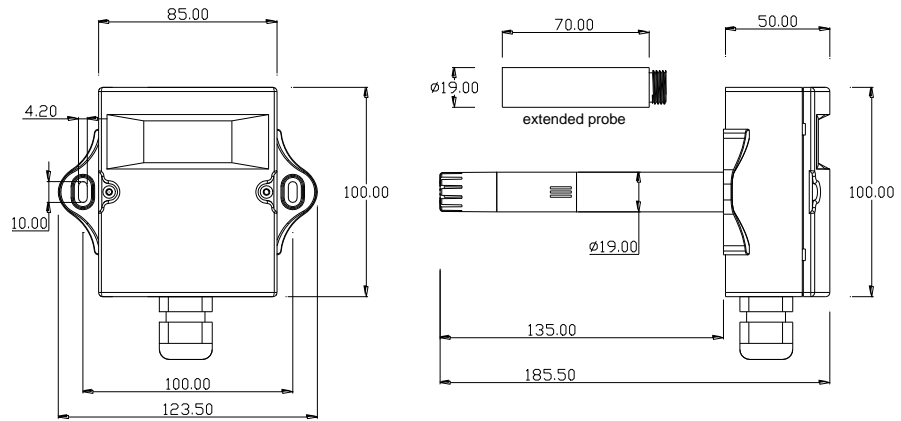
	Temperature	Relative Humidity
Accuracy	±0.4°C @20°C	±3%RH (20%-80%RH)
Measuring range	0°C~50°C(32°F~122°F) (default)	0 -100%RH
Display resolution	0.1°C	0.1%RH
Stability	±0.1°C	±1%RH per year
Storage environment	10°C-50°C, 20%RH~60%RH	
Output	2X0~10VDC(default) or 2X 4~20mA (selectable by jumpers) 2X 0~5VDC (selected at placing orders)	
RS485 interface(optional)	Modbus RS485 interface	
Power supply	24 VDC/24V AC ±20%	
Power usage	≤1.6W	
Permissible load	Max. 500Ω (4~20mA)	
Connection	Screw terminals/ wire diameter:1.5mm <sup>2</sup>	
Housing/ Protection class	PC/ABS fireproof material IP40 class / IP54 if requested	
Dimensions	THP Wall-mounting series: 85(W)X100(H)X50(D)mm+65mm(external probe)XØ19.0mm TH9 Duct-mounting series: 85(W)X100(H)X50(D)mm +135mm(duct probe) XØ19.0mm	
Net weight	THP Wall-mounting series: 280g TH9 Duct-mounting series: 290g	

## Dimensions & Mounting

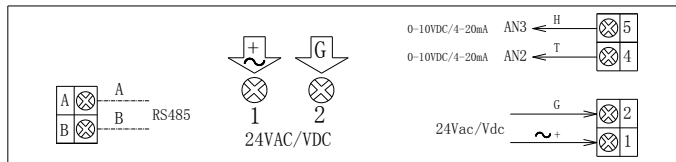
THP Series-Wall mounting



TH9 Series-Duct mounting



## Wiring Diagrams



## Models Information

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

	<b>TH9211/221/231</b>	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
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**Postfix 1: temperature scaling** (non-requested option)

**T05:** 0°C~50°C(32°F~122°F) default (no 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 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 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