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

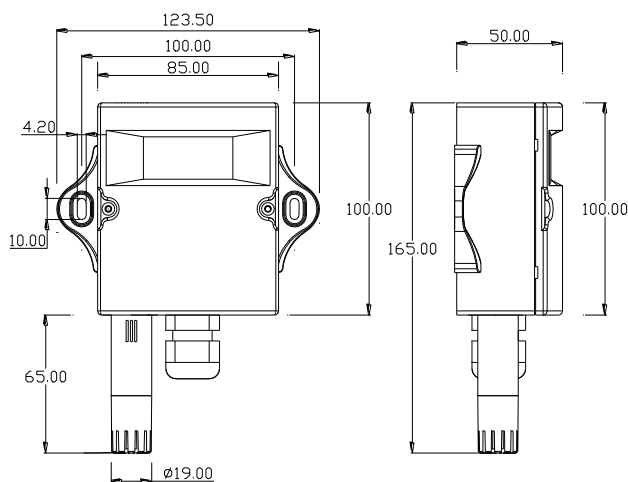## Specifications

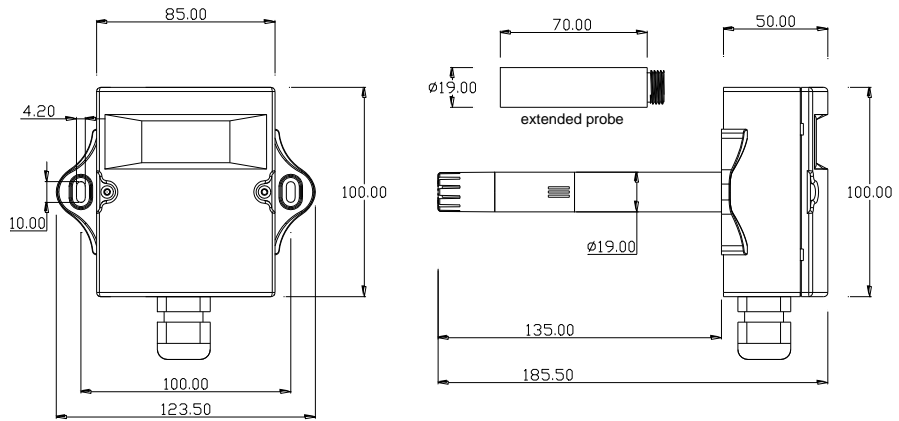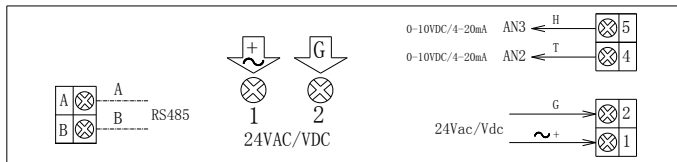|	Temperature	Relative Humidity
Accuracy	±0.4℃ @20℃	±3%RH (20%-80%RH)
Measuring range	0℃~50℃(32℉~122℉) (default)	0 -100%RH
Display resolution	0.1℃	0.1%RH
Stability	±0.1℃	±1%RH per year
Storage environment	10℃-50℃, 20%RH~60%RH	
Output	2X0~10VDC(default) or 2X 4~20mA (selectable by jumpers) 2X 0~5VDC (selected at 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^2	
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)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 a down 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 probe 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℃~50℃(32℉~122℉) default (no option means the default)

    T06:   0℃~60℃(32℉~140℉)

    T26:   -20℃~60℃(-4℉~140℉)

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℃~50℃.

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