

HT series Humidity & Temperature Sensor

PRODUCT DATA



Specifications

Relative Humidity

Measurement Range: 0~100%RH
Output: 4~20mA or 0~10VDC
Accuracy: $\pm 2\%$ RH(25°C, 10~90%RH)
 $\pm 3\%$ RH(25°C, 20~80%RH)
Long Term Stability: <0.5% RH per year

Temperature

Temp Sensor: NTC20k, Pt100, Pt1000
Measurement Range: 0~50°C, 0~100°C, -50~50°C
Range selected by Jumper
(0~50°C as default)
Output: 4~20mA, 0~10VDC or
Mod-bus
NTC20k, Pt100, Pt1000
Accuracy: $\pm 0.2\text{K}$ at 25°C
for NTC20k sensor
 $\pm 0.3\text{K}$ at 25°C
for Pt100, Pt1000 sensor
 $\pm 0.3\text{°C}$ at 25°C ($\pm 2\%$)
 $\pm 0.4\text{°C}$ at 25°C ($\pm 3\%$)
With transmitter
Long Term Stability: <0.04°C per year
Power Supply: 15 - 28 VAC/VDC
Current Output Load: 500 Ohm Max
Current consumption: 40mA Max
Working temperature:
Room type -40°C ~ +70°C
Duct type -40°C ~ +70°C
5% ~ 95% RH without condensation

Transport and Storage

Temperature : 10°C~+50°C

Housing Material: Plastic (ABS)

Protection Standard:

Room type IP20

Duct type IP65

Calibration: Factory calibrated

Application

HT series Humidity and Temperature Transmitters are designed for use with building automation, energy management, and computer / monitoring systems.

These sensors can be used for HVAC system, hospitals, greenhouse, food storage, and incubators.

Features

- 4~20mA, 0~10VDC or Modbus output for both humidity and temperature
- Option for resistance temperature sensor
- LCD display option for both humidity / temperature
- Duct mount and Wall Mount
- 3 temperature ranges are selectable in one model
- High reliability & accuracy
- Wide sensing range
- Rapid response



Model Selection Table

Combined Humidity and Temperature sensor or transmitter

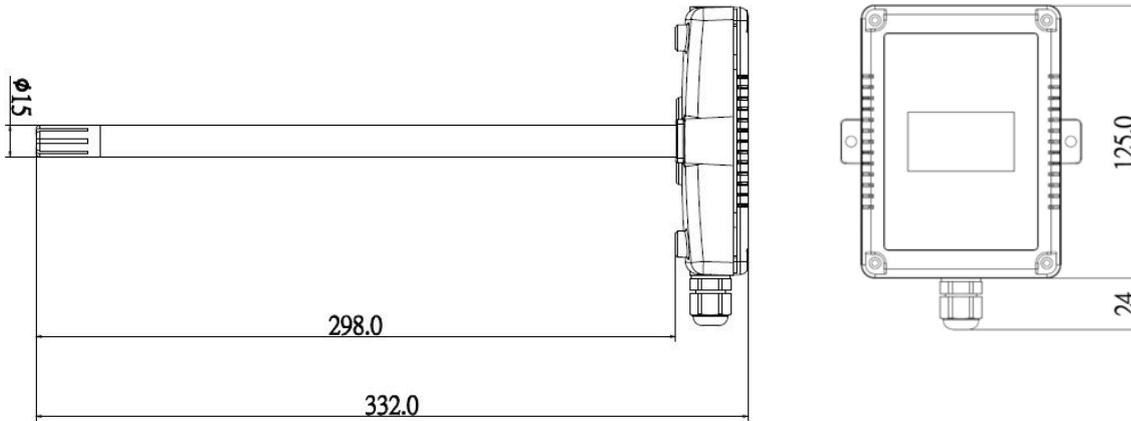
HT3	3% RH transmitter		Base model
HT2	2% RH transmitter		
HD3	3% RH transmitter w/LCD		
HD2	2% RH transmitter w/LCD		
C	4~20mA output		Humidity output
V	0~10V output		
M	RS485 with Modbus (RH+Temp. model only)		
2	Wall mount		Housing
3	Duct mount 12" probe		
7	Remote Sensor		
8	Outside Air		
0	No temp. output		Temp. range
1	w/temp. Xmitter 0~50C (0~100 by dip sw.)		
P	w/Pt 100 sensor		
Q	w/Pt 1000 sensor		
K	w/NTC 20k sensor		

Temperature sensor or transmitter

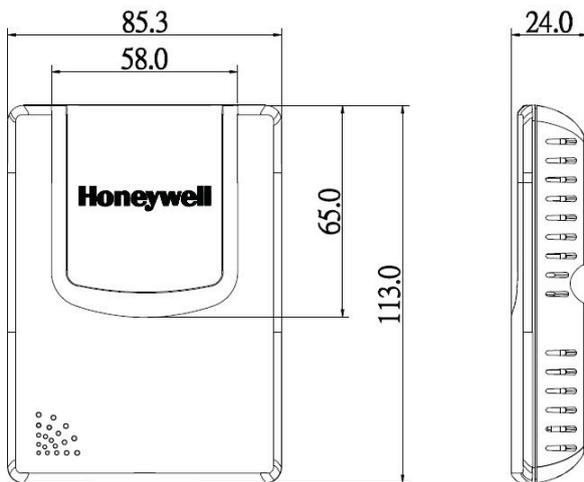
T7	Temp. sensor/transmitter(Pt100)		Base model
TD	Temp. transmitter w/LCD(only for Transmitter)		
2	Space mount		Housing
3	Duct mount 12" probe		
4	Immersion mount 4" probe ("*"length optional)		
6	Immersion mount 6" probe		
7	Remote Sensor		
8	Outside Air		
9	Duct 20' Ave (4~20mA model only)		Output & range
C1	w/temp. Xmitter, 4~20mA, 0~50C		
V1	w/temp. Xmitter, 0~10V, 0~50C		
M	RS485 with Modbus		
P	w/Pt 100 sensor		
Q	w/Pt 1000 sensor		
K	w/NTC 20k sensor		

Dimension (Dimension in mm)

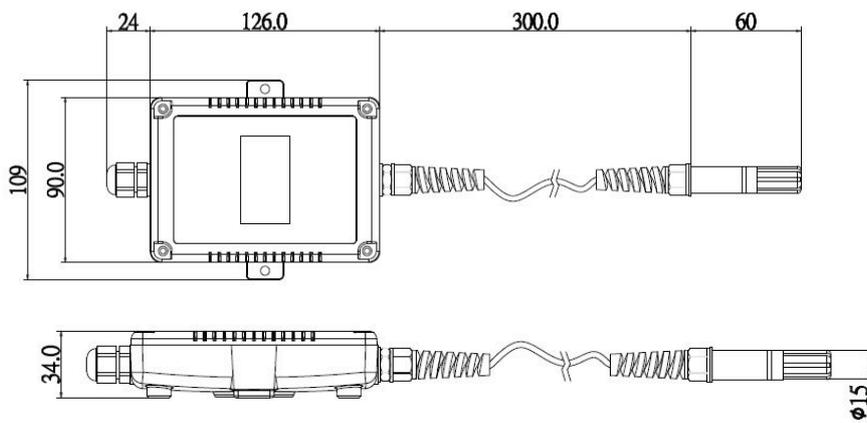
Duct mount Sensor / Transmitter



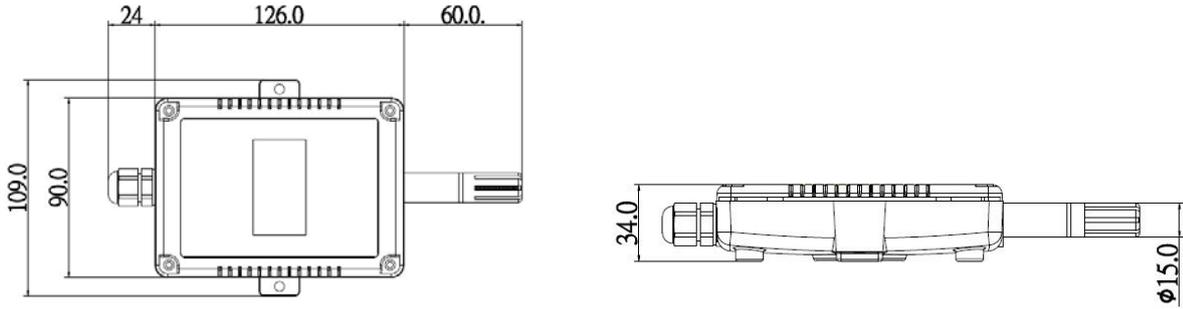
Wall mount Sensor / Transmitter



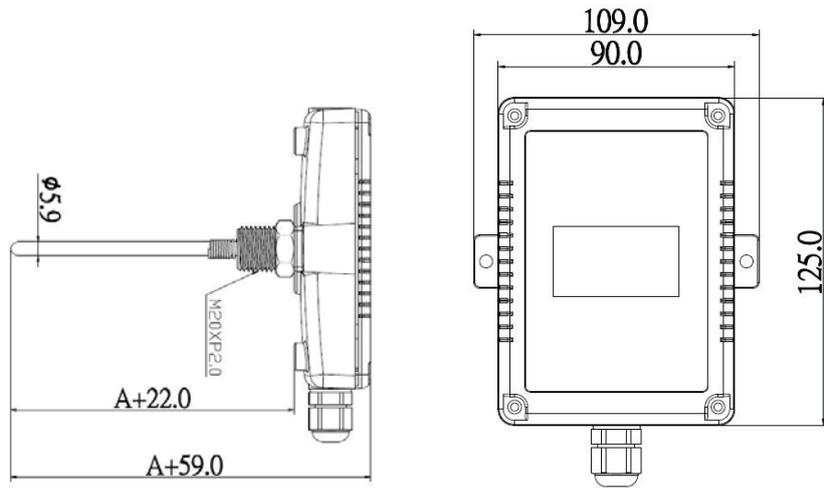
Remote Sensor / Transmitter



Outside Air / Transmitter



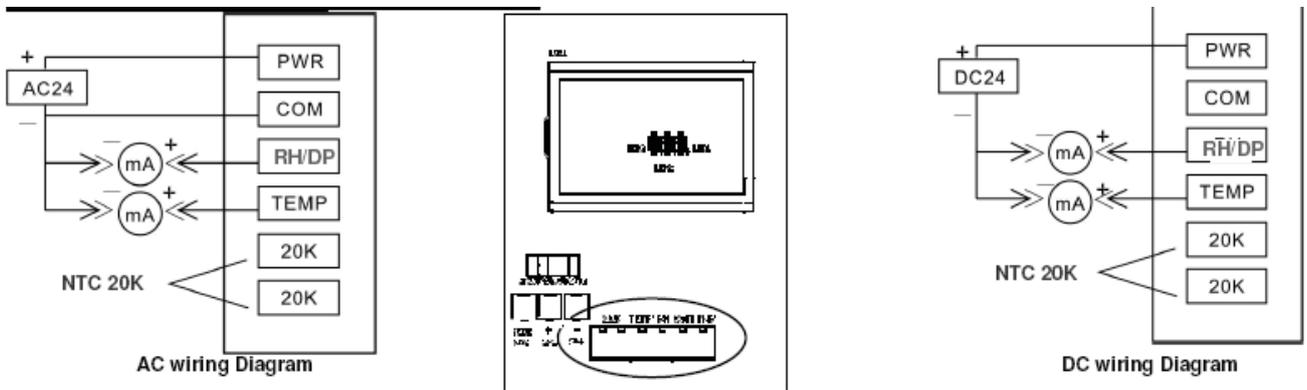
Temperature Sensor / Transmitter



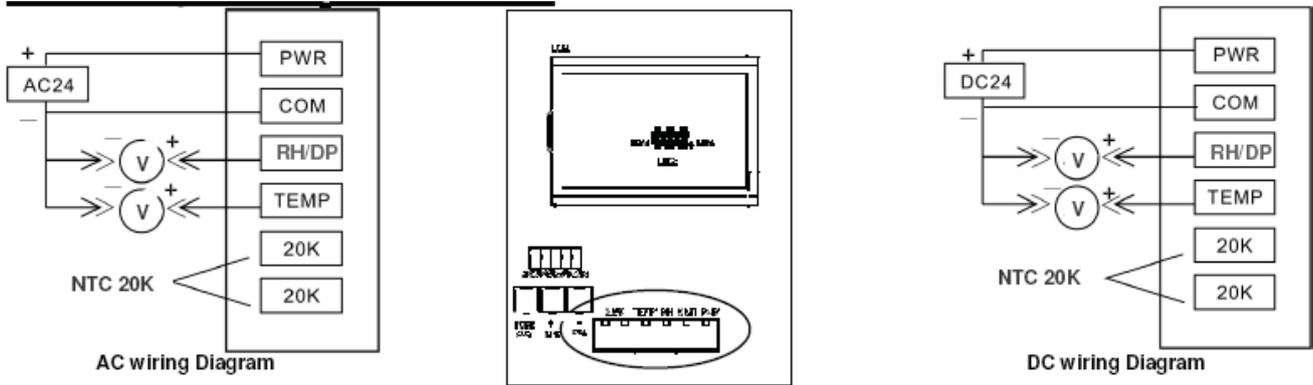
Dimension in mm

Wiring

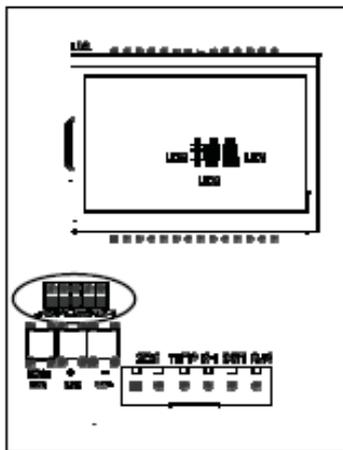
Current Output



Voltage Output



Temperature Range Selection



Jumper setting

1. By selecting JP1 to "0" position, the display shows Celsius mode; by selecting JP1 to "1" position, the display shows Fahrenheit mode.

Select temperature range with jumper according to your application.

温度範圍設定 Temperature range	JP5	JP4	JP3	JP2	JP1
0~50℃	0	1	0	-	-
0~100℃	1	0	0	-	-
-50~50℃	0	0	1	-	-
任意溫度範圍調整 Free range (within specification)	1	1	0	-	-
℃	-	-	-	-	0
℉	-	-	-	-	1

2. By selecting JP2 to "1" position, the unit will commence the mode adjustment. After completion of mode adjustment, the unit will enact the mode setting.
3. JP3, JP4, and JP5 are used to select temperature range.