

NTS 950 SERIES TEMPERATURE & HUMIDITY SENSOR

SENSORS & OTHERS



NTS 950 SERIES

NTS 950 series Temperature & Humidity sensor is designed for a variety of heating and cooling applications controlled by water valves and damper actuator.

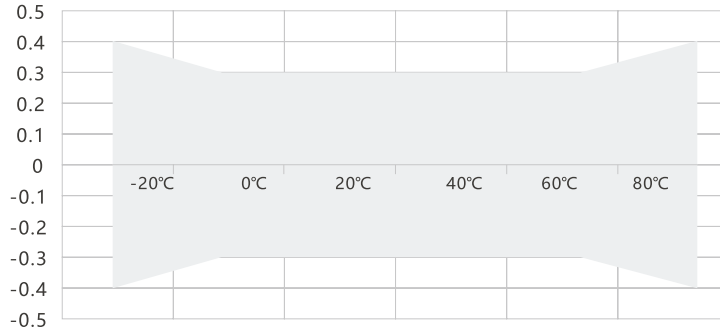
PRODUCT FEATURE

- New look with quick-fit design for easy installation
- Imported sensors, high precision, fast response, robust stability, excellent anti-interference protection
- CE certification, IP65, RoHS
- Large LCD backlight panel, dual temperature and humidity display.
- Multiple selections of installation type and output mode.

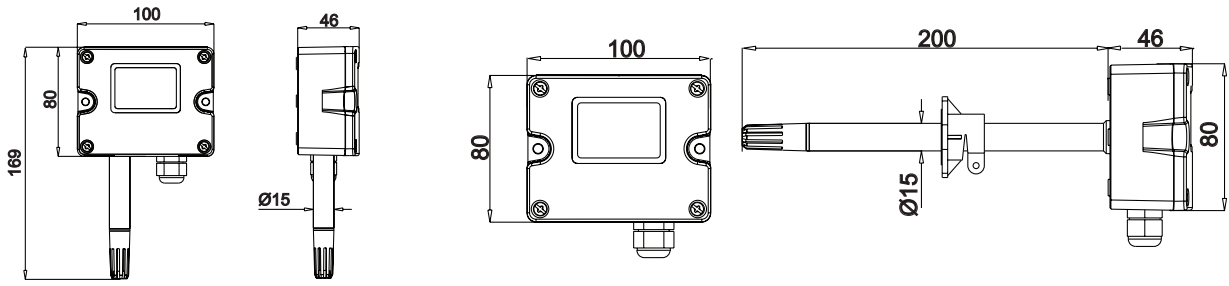
TECHNICAL SPECIFICATION

RELATIVE HUMIDITY		
SENSOR	Digital	
RANGE	0%~100%RH	
OUTPUT	RS485 / Modbus, 0-10VDC, 4-20mA optional	
ACCURACY	± 3% @ 20°C & 20~80%RH	
RESPONSE TIME	≤10s (20°C, slow flow air)	
TEMPERATURE		
SENSOR	Digital or thermal resistance, see model selection table	
RANGE	0~50°C, -20~60°C etc.	
OUTPUT	RS485/Modbus, 0~10VDC, 4~20mA optional	
THERMAL RESISTANCE	see model selection instruction and thermal Resistance index table	
ACCURACY	Digital transmitter: ±0.3°C @ (0~60°C) see below table. Thermal resistance transmitter typical ±0.2~0.4°C @ 25°C	
POWER SUPPLY	Voltage type/RS-485: 15~35VDC/24VAC±20% (AC power supply needs to be connected to an isolation transformer)	Current type: 18.5~35VDC (RL=500Ω) 8.5~35VDC (RL=0Ω)
OUTPUT LOAD	<500Ω (Current type), ≥2KΩ (Voltage type)	
DISPLAY	LCD display optional, with unit display and backlight (4-20mA without backlight)	
CASE MATERIAL	PC shell, PA6 probe rod and polymer filter (optional stainless steel probe and stainless steel sintered filter)	
WORKING ENVIRONMENT	-20~60°C, 5%~95% RH (non-condensing)	
PROTECTION GRADE	IP65	

DIGITAL SENSOR TEMPERATURE ACCURACY CURVE

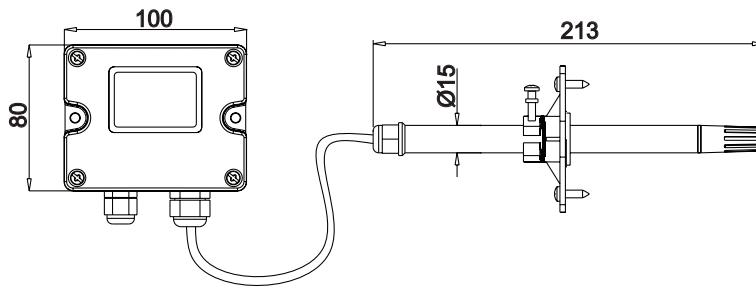


PRODUCT SIZE



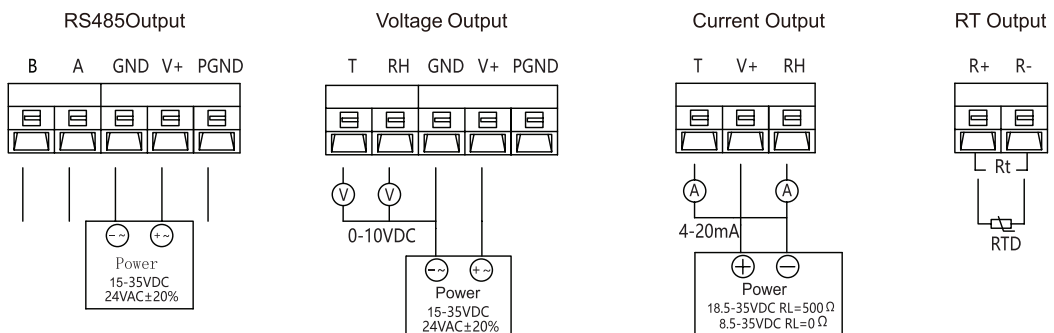
Wall mounted type

Duct type



Split type

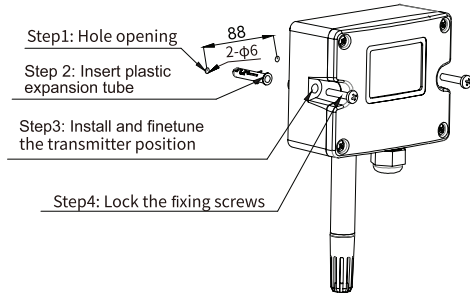
WIRING INSTRUCTIONS



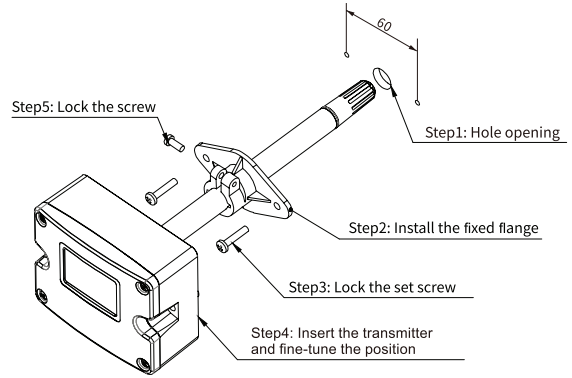
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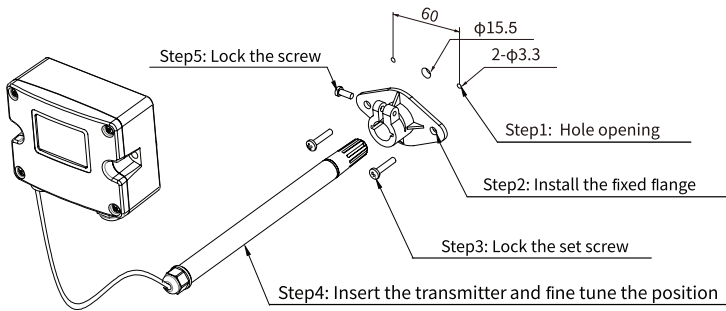
PRODUCT INSTALLATION



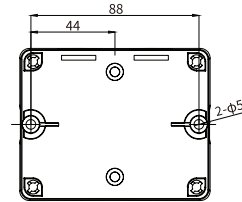
Wall mounted type



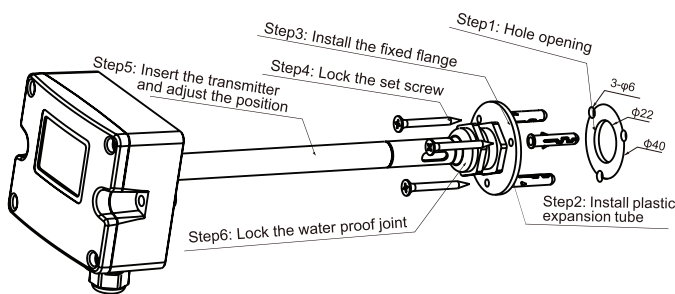
Duct type



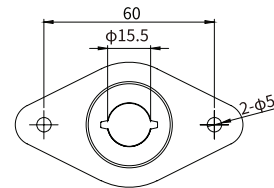
Split type



Wall mounted & Split type wall mounting hole



Metal flange installation diagram



Duct type & Split type flange mounting holes

1. Duct type is recommended to be installed with flange accessories, and the insertion depth can be adjusted. Fix the mounting flange on the air duct with two screws, the screws on the flange can lock the inserted probe. The opening of the air duct is Ω 15.5 mm. After the probe is installed, the air duct should be sealed to avoid air leakage.
2. Wall mounted & Split type should be vertical when wall-mounted, and pay attention to the probe facing down. The installation location should be far away from the factors that affect the measurement, such as cold and heat sources, etc., and should avoid direct sunlight or rain, and if necessary, install a sunshade or rain cover. On the installation plane, open 2 fixing holes according to the hole size in the installation drawing (see above), and then use 2 screws to fix the bottom box. The Split type probe tube installation description is the same as the Duct type using flanged installation.
3. Open the top cover, connect the power cord and signal line to the bottom box through the waterproof connector, complete the wiring according to the wiring diagram, and install the top cover back to its original state. Pay attention to the sealing between the waterproof connector and the bottom box (with a sealing ring), and the sealing between the upper cover and the bottom box (with a sealing ring), so that the overall protection level can reach IP65.

MODEL SELECTION TABLE

Series No.		Temp. Output	Hyphenated	Housing	Humidity Output	Temp. Range	Display Mode
NTS	95	1	-	D	8	2	0
		1= 0~10VDC (3-wired)		W= Wall-mounted	1= 0~10VDC (3-wired)	0= Null	0= No
		3= 4~20mA (2-wired)		D= Duct	3= 4~20mA (2-wired)	1= 0~50°C	1= LCD Display
		4= PT1000, $\pm 0.2^{\circ}\text{C}@0^{\circ}\text{C}$		S= Split	8= RS485/Modbus	2= -20~60°C	
		5= PT100, $\pm 0.2^{\circ}\text{C}@0^{\circ}\text{C}$					
		6= NTC20K, $\pm 0.4^{\circ}\text{C}@25^{\circ}\text{C}$					
		7= NTC10K, $\pm 0.4^{\circ}\text{C}@25^{\circ}\text{C}$					
		8= RS485/Modbus					

1. The current type of Duct type & Split type product is powered by the humidity loop, so this loop must be used, otherwise the product cannot work normally.
2. Only when the temperature output option is 1,3,8, you need to select the corresponding temperature range 1 or 2; otherwise you can only select 0.
3. If the sensor probe of this product is exposed to high-concentration chemical gas for a long time, may cause the transmitter's reading offset.
4. To choose a metal rod temperature and humidity transmitter, you need to clearly write the specifications of the metal rod and the front cover in the remarks.