

# HTX72/73 Series

## Climate Control Temperature & Humidity Transmitter

### FEATURES

- Thin Film Polymer Sensor
- High Accuracy & Safety
- Current or Voltage Output
- Water-Proof Housing
- Compact & Slim Size
- Easy Installation

### APPLICATIONS

- HVAC
- Cleanroom
- Dehumidifier
- Humidifier
- Precision Air-Conditioner
- Building Automation
- Garden(Farm)
- Lab/Test Room
- Museum / Show Room
- Industrial (Production / Storage)
- Semi-Conductor
- Subway / Train
- Pharmacy, Food
- Factory Automation
- Printing Factory
- Environmental Monitoring System
- Weather monitoring
- Road
- Mobile Base Station

HUMITRON® HTX72/73 series is an economical model for the general climate controlling circumstance and makes it possible to measure the exact temperature and humidity. Also, HTX73 series can maintain longterm durability in the circumstance where is dusty and occurs constant air flow by applying stainless steel mesh filter. You can choose either duct mount type or wall mount type according to installed place or method.

#### o Water-Proof & Independent Structure

- Minimizing outside influences at high humid place
- Removing self-heating error by isolation of fine heat at circuit part

#### o Choosing Metal Mesh Filter

- Excellence in sensor protection & high response speed
- Removable structure for easy installation & maintenance

#### o Operational with Low Voltage (6 volts)

- Superior to long-distance transmission
- Usable at high impedance

#### o Basic for Humidity Measuring, Option for Temperature Measuring

- Cost Saving Effect
- Minimization

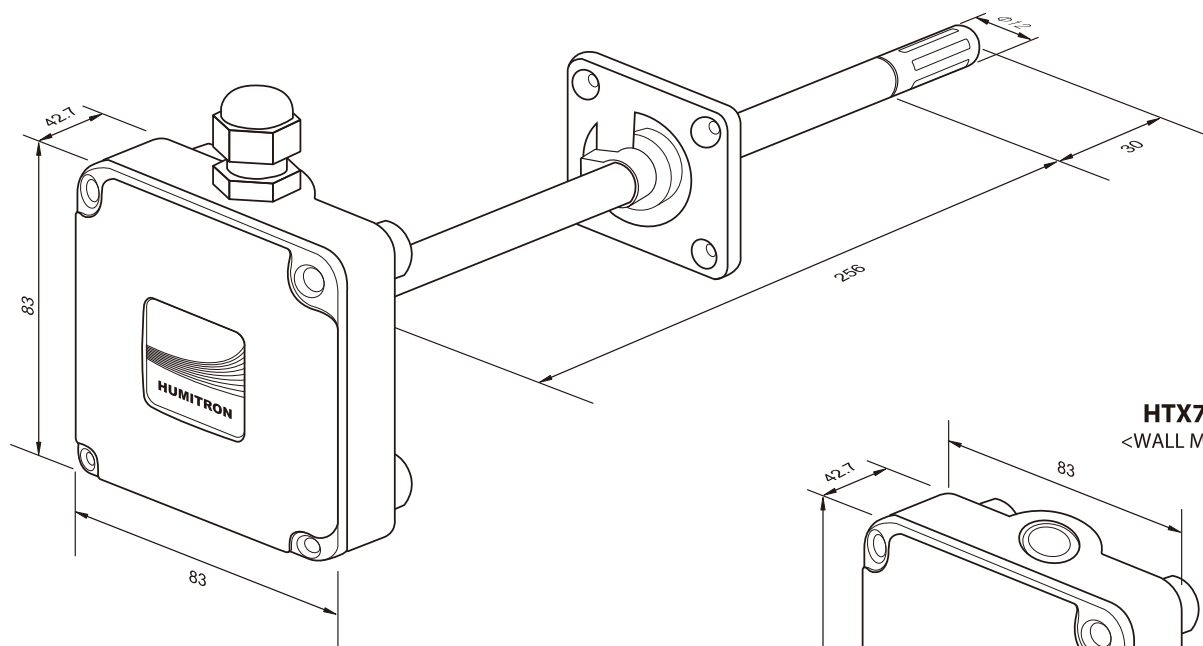


### SPECIFICATIONS

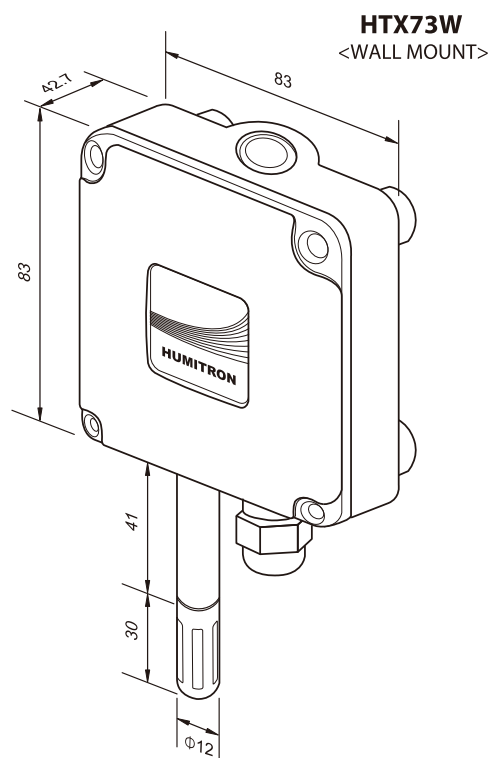
| Item \ Model      |                 | HTX72                                                                                       | HTX73     |
|-------------------|-----------------|---------------------------------------------------------------------------------------------|-----------|
| Humidity          | Range           | 0 ... 100 %rh                                                                               |           |
|                   | Accuracy        | ± 2.0 %rh                                                                                   | ± 3.0 %rh |
|                   | Linearity       | ± 0.5 %rh                                                                                   |           |
|                   | Repetitiveness  | ± 0.5 %rh                                                                                   |           |
|                   | Response        | 15 Sec. (25°C, under the low velocity of wind)                                              |           |
|                   | Output          | 4 ... 20mA(2-Wire)                                                                          |           |
| Temperature       | Range           | -30 ... 70°C, -20 ... 80°C, -10 ... 60°C                                                    |           |
|                   | Accuracy        | ± 0.3 °C                                                                                    | ± 0.5 °C  |
|                   | Sensing Element | PT100Ω Class A                                                                              |           |
|                   | Output          | 4 ... 20mA(2-Wire) or Passive Elements<br>(Pt100Ω, Pt1000Ω, Ni1000Ω, NTC5K, NTC10K, Custom) |           |
| Sensor Protection |                 | ABS + Mesh-Filter                                                                           |           |
| Supplying Power   |                 | 24Vdc(6 ... 30Vdc) or 24Vac                                                                 |           |
| Size(W×H×Dmm)     |                 | 83 x 83 x 42.7 (Cable gland, probe/filter is out of scope)                                  |           |
| Cable Gland       |                 | PG9 (Black, Anti-Drag, 3 ... 6.5mm)                                                         |           |
| Wiring Type       |                 | Plug Type, 2~5pins Terminal Block, 14 ... 22AWG                                             |           |
| Housing           |                 | ABS, Water-proof Structure (IP65)                                                           |           |
| Weight            |                 | Wall Type : 105g / Duct Type : 134.4g                                                       |           |



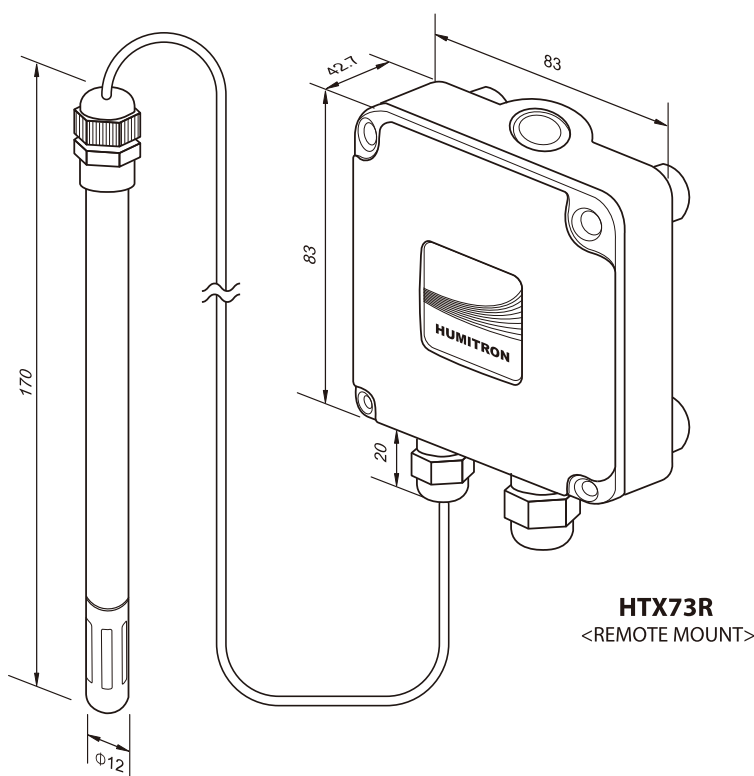
## Housing Dimension(mm)



**HTX73D**  
<DUCT MOUNT>

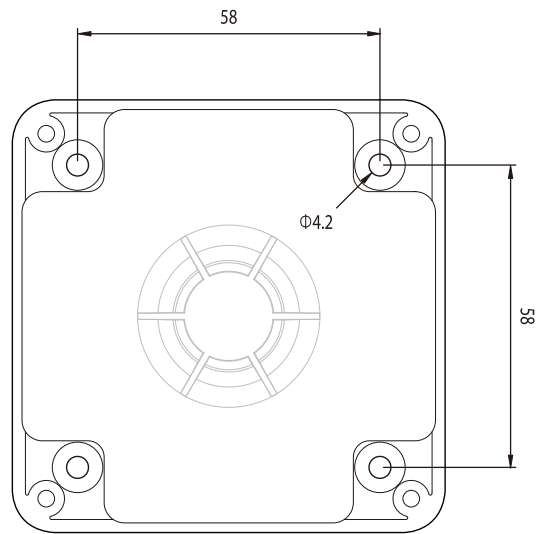


**HTX73W**  
<WALL MOUNT>

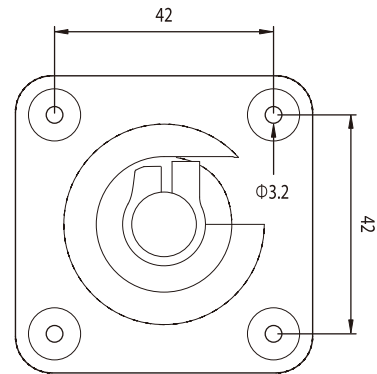


**HTX73R**  
<REMOTE MOUNT>

**Mounting Dimension(mm)**



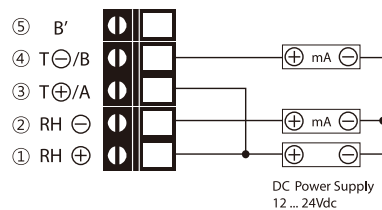
<Wall & Duct Mount>



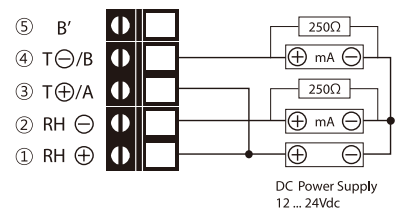
<Duct Mount Bracket>

**Connection Diagram**

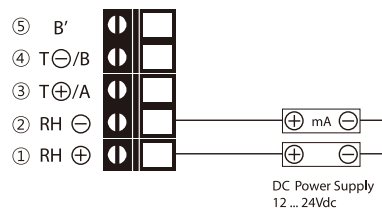
• HTXnn-FTC (Humidity : 4 ... 20mA, Temp. : 4 ... 20mA)



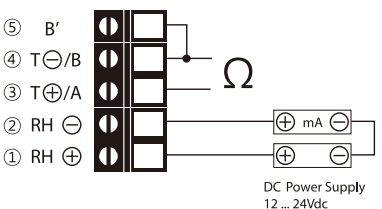
• HTXnn-FTC (Humidity : 1 ... 5V, Temp. : 1 ... 5V)



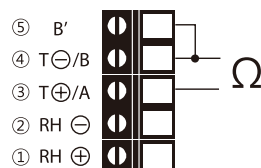
• HTXnn-FHC (Humidity : 4 ... 20mA)



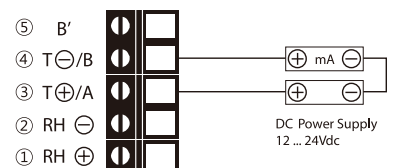
• HTXnn-FPC (Humidity : 4 ... 20mA, Temp. : Passive)



• HTXnn-FBS (Temperature : Passive)



• HTXnn-FBC (Temperature Only : 4 ... 20mA)



## Ordering Guide

| Series | Accuracy | Mount | Type | Output | Temp. Range | Description               |                                    |                             |
|--------|----------|-------|------|--------|-------------|---------------------------|------------------------------------|-----------------------------|
| HTX    |          |       |      |        |             | HUMITRON HTX Series       |                                    |                             |
|        | 72       |       |      |        |             | RH : ±2.0%, Temp : ±0.3°C |                                    |                             |
|        | 73       |       |      |        |             | RH : ±3.0%, Temp : ±0.5°C |                                    |                             |
|        |          |       | W    |        |             |                           | Wall Mount Type (Room)             |                             |
|        |          |       | D    |        |             |                           | Duct Mount Type                    |                             |
|        |          |       | R    |        |             |                           | Remote Probe Type                  |                             |
|        |          |       | FT   |        |             |                           | Humidity & Temperature             |                             |
|        |          |       |      |        |             |                           | Humidity & Passive element         |                             |
|        |          |       |      |        |             |                           | Humidity Only                      |                             |
|        |          |       |      |        |             |                           | Temperature Only                   |                             |
|        |          |       |      |        |             |                           | Humidity Only (Temp. Compensation) |                             |
|        |          |       |      |        | C           |                           |                                    | Current Output 4 ... 20mA   |
|        |          |       |      |        | S           |                           |                                    | Element Only (FB Type Only) |
|        |          |       |      |        | L           |                           |                                    | -30°C ... 70°C              |
|        |          |       |      |        | H           |                           |                                    | -20°C ... 80°C              |
|        |          |       |      |        | J           |                           |                                    | -10.0°C ... 60.0°C          |
|        |          |       |      |        | K           |                           |                                    | Other(by Custom)            |
|        |          |       |      |        | PT100       |                           |                                    | FT Type RTD PT100 ohm       |
|        |          |       |      |        | PT1K        |                           |                                    | RTD PT1000 ohm              |
|        |          |       |      |        | NTC5K       |                           |                                    | NTC5K ohm                   |
|        |          |       |      |        | P           |                           |                                    | Other(by Custom, Element)   |

※ Remote Probe Type Cable Length 3m

## Ordering Example

### HTX73W-FTCL

- Model : Humidity & Temperature Transmitter
- Accuracy : RH :  $\pm 3.0\%$ , Temp. :  $\pm 0.5^{\circ}\text{C}$
- Output : 4 ... 20mA (Humidity), 4 ... 20mA (Temperature)
- Housing : Wall mounting
- Temperature Range :  $-30 \dots 70^{\circ}\text{C}$