Temperature Humidity Transmitter

Manual V1.2

Notice:Please read this user manual carefully before using.

1) Please kindly check whether the transmitter is same as what you ordered after when you received the transmitter. Please contact us immediately if there are any errors on transmitter to offer you our technical support.

2) Please should read and master its connections and operation first carefully before testing and installing the transmitter.

3) Please should guarantee the transmitter is working on its required working conditions.

Technical data

※ Output signal

   T：0-5V，RH：0-5V（load current≤1mA）

※ Power supply：DC9~24V

   Power consumption: less than 1 VA (typical value)

※ Maximum airflow speed: 16 m/s

※ Range

   T:-20～80 ℃ (factory default)

   RH:0~100%RH

※ Accuracy

   T:±0.3℃ at 25℃(full range mean)

    Long term stability: ＜0.04℃/year

   RH:±3% at 25℃, (typical value, 25 ℃)

   Long-term stability: ＜0.5%RH/year

General

※ Operating temperature：-40~80℃

    Operating humidity : 0~99%RH (no condensation)

※ Storage temperature：-40~80℃ Storage humidity：20~60%RH

※Electrical connection：1×2.5 mm² or 2×1.5 mm² (terminal capacity)

※ Standard: compliance, EMC Directive 89 / 336 / EEC
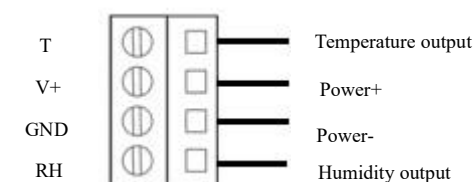
Note: if the temperature exceeds 90 ℃, the sensor may be damaged irretrievably.The above parameters are measured at 25℃ unless otherwise specified.

Installation and Dimension(unit：mm)

16mm

115mm

70mm

58mm

33mm

50mm

34mm

Φ4x2

Insert Type Installation with bracket Wall Type

Electrical wiring diagram
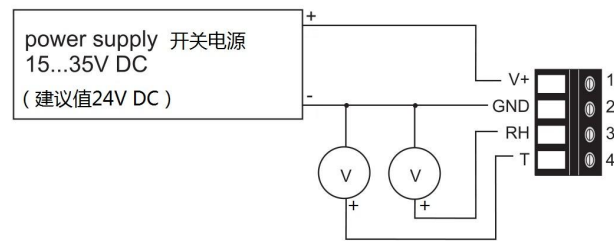

T — Temperature output

V+ — Power+

GND — Power-

RH — Humidity output
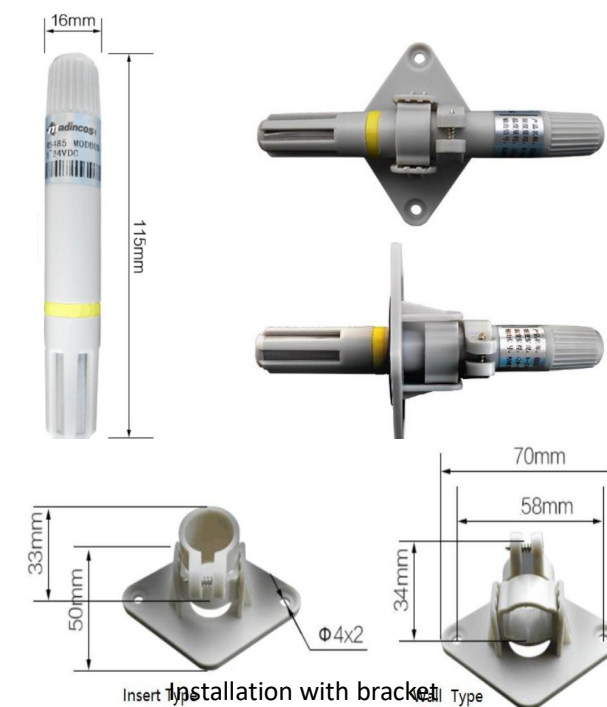
Signal output wiring diagram

Note: the definition of wiring is subject to the label attached to the cable.

Note: due to batch reasons, the colors of cables may be different. Please define the requirements with labels and connect them correctly.

```
power supply  开关电源
15...35V DC
（建议值24V DC）

        + ─────────────────
        - ─────────      |
                  |      |
              V+ ─○○○ 1
              GND ─○○○ 2
              RH ─○○○ 3
              T ─○○○ 4
         V   V
        +   +
```

Electrical wiring diagram

Note: the output signal of this transmitter is 0-5V. If the current type detection equipment is used, please connect the detection equipment in parallel to the output circuit (see the position of voltmeter in typical application circuit). If other detection equipment is used, please make corresponding treatment.

Note: the output of this transmitter shall not be short circuited, which will cause damage to the transmitter. Wrong connection may result in product damage.

Note: please check the grounding relationship between the equipment and the transmitter.

Installation mode

The sensor mounting bracket is composed of two accessories. Please select the installation method according to the actual situation on site. It can be wall mounted, suspended or plug-in, which has no impact on the measurement of the product. The actual effect of the bracket is shown in the following figure:
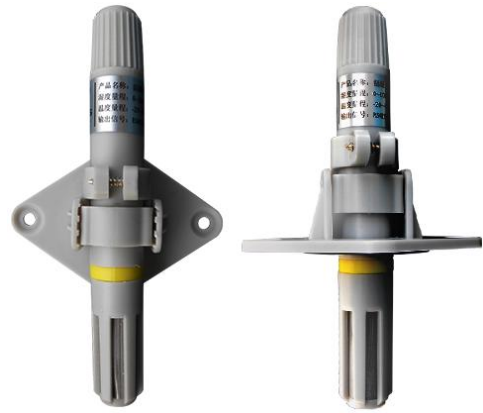

Precautions for use

Each measurement value of the product may be affected by the following factors, which should be avoided and handled in order to ensure the accuracy and stability of the measurement:
◎ Avoid being placed in the test environment for too short a stable time.
◎ Avoid being close to heat source, cold source or direct sunlight.
◎ Avoid long-term exposure to steam, water mist, water curtain or condensation environment.
◎ In dust or other polluted environment, the probe protection net must be cleaned regularly.
Note: please do not touch the temperature and humidity probe with your hands to avoid electrostatic damage to the probe.

Accuracy
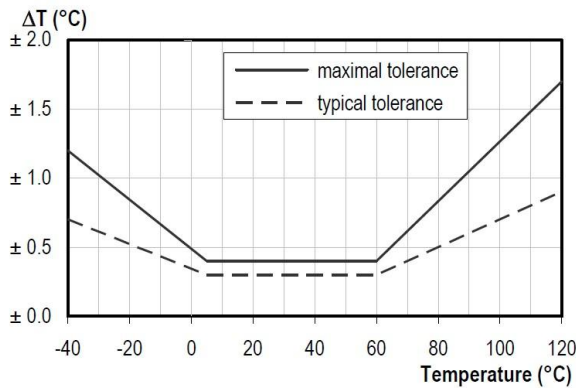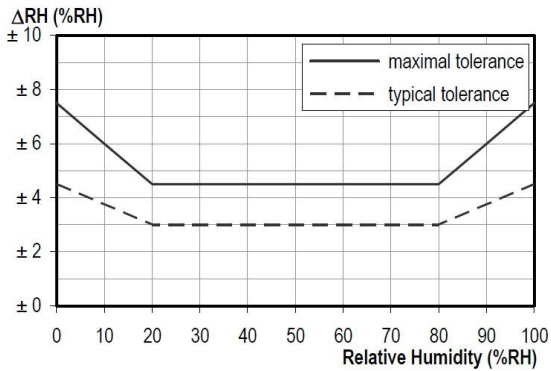
Quality assurance

The company's direct buyer of its products shall provide quality assurance for 12 months (one year). The technical specifications of the data manual for the product published by the company shall prevail. If the product is proved to be defective in the warranty period, the company will provide free maintenance or replacement. Users shall meet the following conditions:
① The product shall notify the company in writing within 7 days of the defect discovery;
② The product should be sent back to the company
③ The product should be in the warranty period.