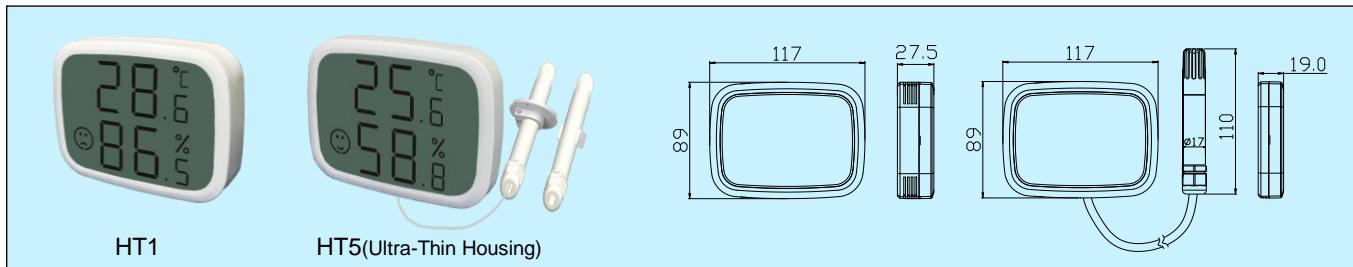


## HT Large LCD Temperature & Humidity Transmitter



### Applications and features

- HT1 is for room application, HT5 has a separate probe with Ultra-thin fashion enclosure (only 19 mm)
- State of art enclosure with large LCD(101x73mm), good for various temperature and humidity display, measurement and transmission applications, such as airports, stations, museums, archives, commercial centers, laboratories, factories, clean rooms, hospitals, etc.
- High-performance digital sensors and circuits to ensure accurate measurement and compensation. HT5 can change probes without re-calibration
- Good long-term stability, fast response
- The terminal blocks are on the back of the housing to protect the circuit board from possible damage during wiring
- Power supply and output have over voltage and reverse polarity protection, with high reliability, good anti-interference ability

#### Temperature:

Range:0~50°C  
Output:4~20mA (2nd )0~10VDC, RS485/Modbus  
Accuracy:0.4°C@0~50°C

Communication:RS485/Modbus RTU, / 9600 baud rate; can be set termination resistor

Display: Large LCD digital display (101x73mm)

Display resolution: 0.1°C (or °F), 0.1%RH

Display refresh time: <1 second

Power: Voltage type 16~28VAC/16~35VDC, Current 18.5~35VDC (RL=500Ω), 8.5~35VDC (RL=0Ω)

Output load: ≤500Ω (current type), ≥2KΩ (voltage type)

Working environment: -10~60°C, 0~95%RH (non-cond.)

Housing Material: Flame retardant PC housing and probe, UL94V-0

Protection: IP30, probe IP65 (except filter)

Weight: HT1:270g; HT5:390g (with 2m cable)

Certification: CE, meet EN61326-1 for industrial equipment

### Technical specifications

**Sensor:** Digital temperature/humidity sensor

#### Relative humidity:

Range:0~100%RH

Output:4~20mA (2 wires), 0~10VDC, RS485/Modbus

Accuracy:3%RH@ 25°C,20~80%RH

Hysteresis:<±1%RH

Response time:<10s (25°C, slow flow air)

Drift:<±0.5% RH/year

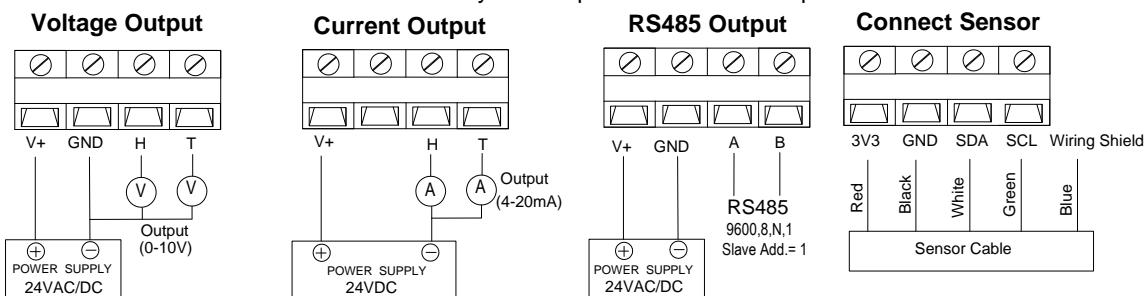
### Models

Model	HT1	HT5	Room temp. and hum. display/transmitter
			Remote temp. & humidity display/transmitter
output		1 2 8	2x0~10VDC (3 wires) 2x4~20mA (2 wires) RS485/Modbus

HT5 has standard cable of 2m. If need more, add suffix -xx, which is the length. 5m or 10m is available, such as HT5x-10, means the cable is 10m.

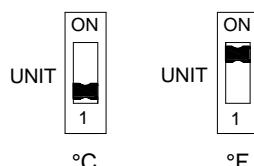
### Connection

Different models have different electrical terminals. Only HT5 requires remote sensor probe connection.



### DIP switch

1. Temperature unit: "ON" for °F, and "1" for °C (default).



2. RS485/Modbus communication refer to "HT Modbus Communication Manual". RS485 terminal resistance dial switch J8 is described as follows:

Turn the switch to "ON", and the terminal resistance is 120 Ω. Turn the switch to "1", and there is no terminal resistance.



Terminal resistance:None(Default)

Terminal resistance:120Ω

## Installation

- HT1 can be installed in the following two ways:

1. Installation with 86 bottom box: it needs an installed 86 bottom box as shown in Fig.1, and the bracket as shown in Fig.2, which is the standard accessory. As shown in Fig.3, install the box into the wall (The recommended inside depth is shown in Fig.4, which should be between 5.5 and 10mm under the surface of the wall). Fix the bracket on the box as Fig.5. The locking force should be moderate to prevent damage or deformation of the bracket, leading to the gap between the back of the detector and the wall is too large eventually. After completing the wiring, as shown in Fig.6, snap the detector into the bracket hooks to complete the installation.

2. Wall mounted installation: as shown in Fig.7, drill a mounting hole on the wall, install a screw with 1-2 mm out of the wall, and lock the detector on. This way is simple but not stable, only for some specific applications.

- HT5 installation:

Detector body installation: it is the same as HT1.

Probe installation:

1. Insertion installation: as shown in Fig.9, drill a hole with a diameter of 19 mm on the installation surface. First fix the flange seal on, then insert the probe through the flange into. After adjusting the probe insertion depth, lock the flange screw to make it hold the probe tightly. The flange installation size is shown in Fig.10. If possible, the probe connecting cable can also be installed inside the embedded pipe in the wall, which will make the installation more pleasing.

2. Surface installation: as shown in Fig. 12, install the accessory on the installation surface, and clamp the probe in.

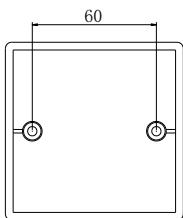


Fig.1

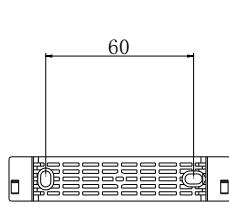


Fig.2

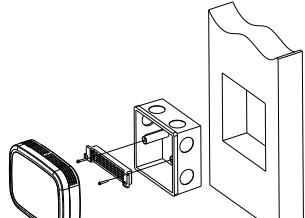


Fig.3

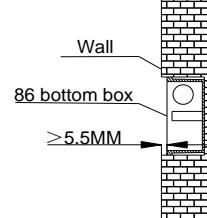


Fig.4

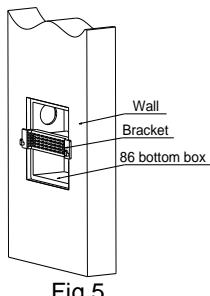


Fig.5

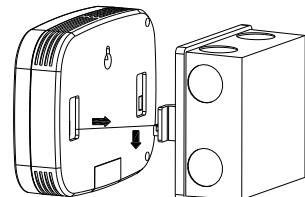


Fig.6

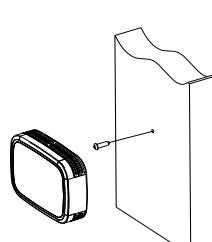


Fig.7

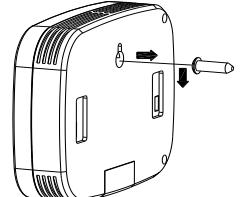


Fig.8

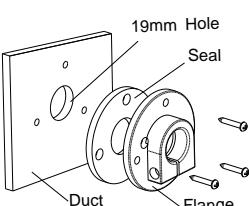


Fig.9

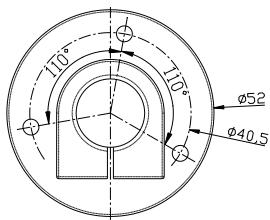


Fig.10

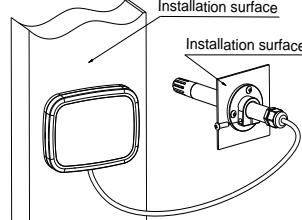


Fig.11

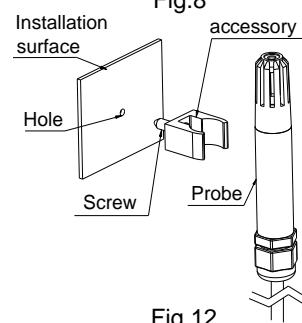


Fig.12

## Attention

It should be power OFF during installing and wiring. When using 24VAC, it is strongly recommended to power the unit with independent transformer. If sharing a 24VAC transformer with other equipment such as controllers, transmitters or actuators, please make sure the terminals 24V and GND are connected correctly. Otherwise, it may reduce serious damages.

## Warranty

It has limited warranty for eighteen (18) months after the production date.



**Shenzhen TEREN Control Technology Co. Ltd.**

14F, Building No.8, Fashion Valley, Shangchenglang, Dalang,

Longhua, Shenzhen, Guangdong, China

Tel: 0755-23935155 Fax: 0755-23935156

web: [www.teren-control.com](http://www.teren-control.com)



TEREN website



Alibaba shop