## Temperature and Humidity Sensor



## Description

The sensor is designed with an LCD display, and can display temperature and humidity in real time. Without screw terminal wiring on the back, it can be installed on a standard 86mm junction box. Using the standard MODBUS-RTU communication protocol, RS485 signal output, the maximum communication distance is up to 2000 meters (measured). And the internal and external probe is optional. It is widely used in classrooms, communication rooms, warehouse buildings, and automatic control places that require temperature and humidity monitoring to realize scene linkage. For example, after the central control obtains the temperature and humidity data, it can make judgments at the bottom layer, and then invoke the corresponding control scene through the preset value, or control a certain device, such as linkage control of air conditioners and so on.

## Feature

- \* LCD display, beautiful appearance.
- \* The terminal block adopts military-grade spring-type screw-free terminals, which can be connected by pressing and inserting. Even if there is no screwdriver on site, the wire can be connected quickly, and the adaptable wire diameter is 0.3-2.0mm2.
- \* With high-precision temperature and humidity measurement units, it supports on-site self-calibration, featuring good long-term stability and small drift.
- \* Adopt dedicated 485 circuit, standard ModBus-RTU communication protocol; communication address and baud rate can be set.
- \* Power supply: 10~30V DC wide voltage range.
- \* Parameters can be set by buttons, easy to operate.

## Specification

Model	TS-9212RH
DC power supply (default)	10-30V DC
Maximum power consumption	0.4W
Measuring precision	±3%RH (5%~95%RH, 25°C); ±0.5°C (25°C)
Transmitter circuit operating conditions	-20°C~+60°C, 0%RH~80%RH
Communication protocol	Modbus-RTU communication protocol
Output signal	485 signal
Temperature display resolution	0.1°C
Humidity display resolution	0.1%RH
Temperature and humidity refresh time	1S
Long-term stability	Temperature≤0.1℃/y; Humidity≤1%RH/y
Response time	Temperature≤15s (1m/s wind speed); Humidity≤4s (1m/s wind speed)
Opening size	60mm
Parameter settings	Modify directly by software settings or keys