



Environmental Sensor

ES-TH0

Industrial Temperature and Humidity Sensor

Temperature and humidity sensor is a cheap wall-mounted temperature and humidity sensor. The shell adopts IP65 high protection grade, which can not only effectively prevent rain and snow erosion, but also ensure air permeability, which can be used for the outdoor temperature and humidity monitoring. Our sensors provide highly accurate relative humidity and temperature readings over a wide working range.



Description

This temp and humidity sensor has two output modes: modbus temperature humidity sensor and analog temperature humidity sensor. Analog output includes three output modes: 0-5v, 0-10v and 4-20mA.

Product Features

The sensor adopts the measuring unit imported from Switzerland, which has high measuring accuracy and strong stability. The temp humidity sensor is powered by a wide voltage range of 10~30V, with complete specifications and easy installation.

High Protection

The overall design of the temperature and humidity sensor is a closed structure, which effectively blocks the contact between the circuit board and the external environment. The built-in probe effectively prevents the interference of sand, dust, and wet weather. The whole meets the requirements of the IP65 protection level. It can be used in the outdoor environment for a long time.

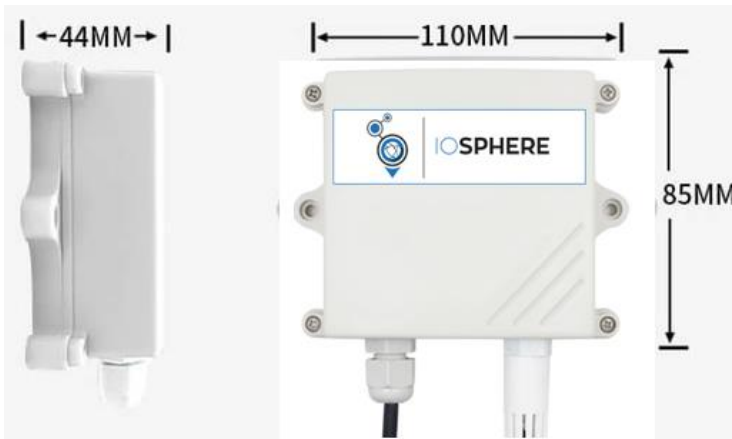


Wide Measuring Range

The temperature measurement range of temperature and humidity sensor are minus 40 degrees to 120 degrees, and the humidity range is 0~100%RH, which can meet the requirements of most users. To meet the requirements of some special users, we designed the probe part to be able to replace other probes as needed. For example, customers can change the probe to a high-temperature probe for measuring a high-temperature environment and change the probe to a low-temperature probe for measuring a low-temperature environment. If you want to measure the temperature of the liquid, you can also switch to a waterproof probe. If you want to measure the temperature in the soil, you can switch to a metal probe.

Industrial Temperature and Humidity Sensor Parameters

DC power supply	DC 10-30V
Maximum power consumption	0.4W
Transmitter circuit working temperature and humidity	-40°C~+60°C, 0%RH~80%RH
Probe working temperature	-40°C~+120°C, default: -40°C~+80°C
Probe working humidity	0%RH-100%RH
A quasi-accuracy	Humidity $\pm 2\%$ RH (5%RH~95%RH, 25°C) Temperature $\pm 0.4^\circ\text{C}$ (25°C)
B quasi-accuracy: (Default)	Humidity $\pm 3\%$ RH (5%RH~95%RH, 25°C) Temperature $\pm 0.5^\circ\text{C}$ (25°C)
Temperature resolution	0.1°C
Humidity resolution	0.1%RH
Temperature and humidity refresh time	1s
Response time	Humidity $\leq 4\text{s}$ (1m/s wind speed), Temperature $\leq 15\text{s}$ (1m/s wind speed)
Output signal	RS485 (Modbus protocol)
Installation method	wall-mounted





Ordering Information

	ES	-	TH	0	-		-	
With Modbus RS485						M		
With 0-10V						V		
With 4-20mA						mA		
Without OLED Screen								0
With OLED Screen								OLED