

SM7310M

Product Overview

SM7310M bracket temperature and humidity sensor, the internal use of imported digital temperature and humidity sensor core and related devices, to ensure that the product has high reliability and excellent long-term stability. RS485, DC0-5V/10V voltage, 4-20mA current and other output modes are designed for selection.

It is widely used in machine room, medicine workshop, food workshop, warehouse, substation, cold storage, HVAC, dehumidifier, testing and testing equipment, agricultural greenhouse, environmental monitoring and other fields.

Parameters

Specifications	Value
Measuring range	-30°C~80°C
Temperature measurement accuracy	±0.5°C@25°C
Moisture measuring range	0~100%RH
Humidity measuring accuracy	±3%RH@25°C
Resolution	0.01
Input voltage	DC18~24V
Output current	4-20mA
power	<1W
Preservation environment	-40 ~ 70°C , 5 ~ 95% RH (No condensation)
working temperature	-40 ~ 85°C (Industrial grade)
Dimensions	See dimensions

wiring method

The device comes with a 1 meter long 4-core cable.

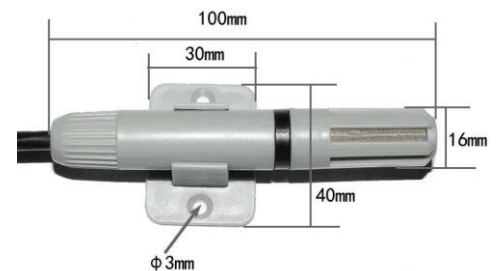
Wire color	Pin	Explanation
Red	V+	Power +
Green	V-	Power -
Yellow	H+	Humidity output
Blue	T+	Temperature output



http:// www.sonbus.com



Package dimensions



This product adopts the industrial general current signal output mode, in which V - is the common foot of the voltage source and power supply. V + and V - are usually connected locally. The humidity signal current output is between V - and H + and the temperature signal current output is between V - and T + respectively.

Instructions

The output is analog, and the current corresponds to the set full range. The relationship between current and specific temperature and humidity values is described below.

The set range of humidity detection is 0-100% RH. The relationship between current and humidity is shown in the following table: if the full range of humidity is recorded as HA, the read current value is AR, the actual corresponding humidity value is HR:

$HR=(AR-4)*HA/16$, the commonly used data can be listed as follows:

Readout Current Value (mA)	Readout Humidity Value (100% RH)	Computation process
4	0	$(4-4)*100/16$
8	25	$(8-4)*100/16$
12	50	$(12-4)*100/16$
16	75	$(16-4)*100/16$
20	100	$(20-4)*100/16$

For example, the range of temperature measurement is set as follows: - 30 to 80 C. The relationship between current and temperature is shown in the following table: if the full range of temperature is recorded as TA, the read current value is AR, the actual corresponding humidity value TR is:

$TR=(AR-4)*TA/16-30$

Readout Current Value (mA)	Read out the temperature value (C)	Computation process
4	-30	$(4-4)*110/16-30$
8	-2.5	$(8-4)*110/16-30$
10	11.25	$(10-4)*110/16-30$
12	25	$(12-4)*110/16-30$
16	52.5	$(16-4)*110/16-30$
20	80	$(20-4)*110/16-30$