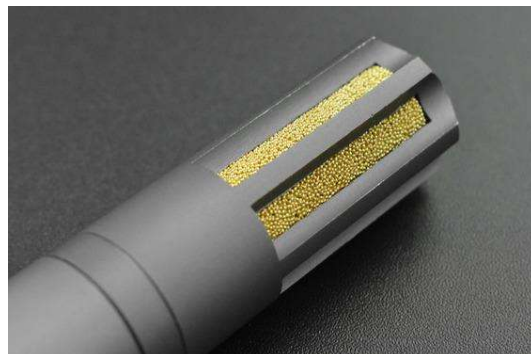




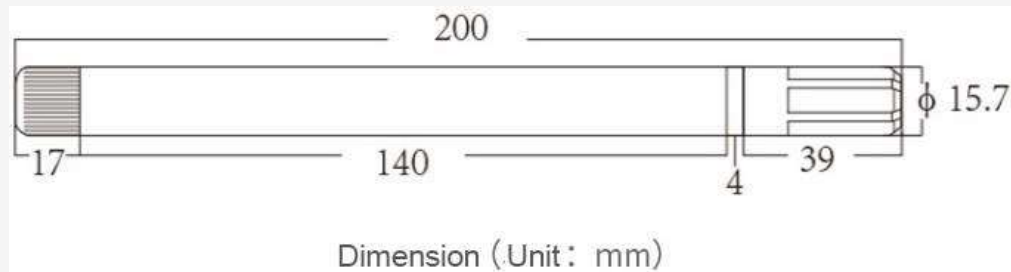
RS485 Temperature & Humidity Sensor

SKU:SEN0438



INTRODUCTION

This is a high-precision industrial-grade RS485 temperature and humidity sensor. It uses high-quality digital integrated transducer and reliable digital processing circuit to convert the temperature and humidity in the environment into corresponding RS485 signals. And it can reliably carry out centralized monitoring jobs with the host computer system.



Featuring a wide measurement range, a high detection accuracy, and a fast response speed, the module supports temperature detection of -40 to 120 degrees and humidity detection of 0 to 99.9% RH. Fully wrapped by the aluminum alloy shell, the sensor is waterproof and heat resistant, which makes it suitable for harsh environments. Besides, its probe employs a breathable and dust-proof design that effectively protects the internal circuit board and prolongs the service validity period.



The product has remarkable long-term stability, low latency, high resistance to chemical pollution, and superior repeatability. It is an ideal solution for accurately measuring relative humidity and temperature in HVAC (Heating, ventilation, and air conditioning) applications. This sensor can be widely used in building automation, climate and HVAC automatic control, climatology stations in museums and hotels, closed-loop control of HVAC systems, etc.

SPECIFICATION

- Temperature Measurement Range: -40 ~ 120°C
- Humidity Measurement Range: 0 ~ 99.9%RH
- Temperature Accuracy: $\pm 0.3^{\circ}\text{C}$ (25°C)
- Humidity Accuracy: $\pm 2\%\text{RH}$ (25°C)
- Sampling Cycle Period: 3 sec
- Power Supply Voltage: 12 ~ 36V (DC)
- Product Size: 200mm(L) \times 15.7mm(D) / 7.87 \times 0.62"
- Output Signal: RS485 signal
- Communication Protocol: standard MODBUS RTU protocol
- Baud Rate: 9600 (default)
- Display Resolution: Temperature: 0.1°C; Humidity: 1%RH
- Product Net Weight: 110.0g
- Sensitivity Attenuation Value: temperature $< 0.1^{\circ}\text{C}/\text{year}$; humidity $< 0.5\%\text{RH}/\text{year}$
- Wire Sequence: yellow wire - RS485 A; red wire - power input; black wire - GND; white wire - RS485 B

DOCUMENTS

- [Instruction manual](#)

SHIPPING LIST

- RS485 Temperature Humidity Sensor x1