



SenseCAP S-TH-01 Air Temperature and Humidity Sensor





PRODUCT DESCRIPTION

The Seeed Studio RS485 Temperature & Humidity Sensor with Aviation Connector is a rugged and reliable sensor designed for industrial and environmental monitoring. It communicates via MODBUS-RTU (RS485) protocol and measures temperature from -40°C to $+80^{\circ}\text{C}$ and relative humidity from 0 % to 100 % RH. With high accuracy and a waterproof aviation connector, it's ideal for outdoor and agricultural use. The IP54-rated enclosure provides dust and splash protection, and the sensor supports easy wall or pipe mounting. Compatible with SenseCAP data loggers and other RS485 systems, this sensor is a great fit for smart farming, greenhouse, and climate monitoring applications.

FEATURES

- RS485 Modbus-RTU temperature & humidity sensor
- Wide range: -40°C to $+80^{\circ}\text{C}$, 0 %–100 % RH
- ± 3 % RH accuracy, 0.01 % RH resolution
- Waterproof aviation connector, IP54 rated
- Low-power, wide voltage (3.6 to 30 V DC)

APPLICATION

- Smart Agriculture
- Smart Cities
- Smart Buildings
- Smart Industry Environmental Monitoring
- Other Wireless Sensing Applications

SPECIFICATIONS

PRODUCT MODEL

Model	S-TH-01
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GENERAL PARAMETER

Signal Output	RS485 ModBus Protocol
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Support Protocol	LoRaWAN v1.0.3 Class A
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GENERAL PARAMETER

Power supply	3.6-30V/DC
Current Consumption	4mA@24V DC
Humidity Measurement Range	0- 100% saturation, resolution 0.01% Accuracy: $\pm 3\%$ RH
Temperature Measurement Range	-40~80°C, resolution: 0.01°C, Accuracy $\pm 0.3^\circ\text{C}$
IP Rating	IP54
Operating Temperature	-40 to +85 °C
Installation Methods	Wall-mounted Installation and Tube installation
Cable Length	2M
Connection Methods	Aviation connector and Hook-up wire