

AM2305 Temperature & Humidity Sensor



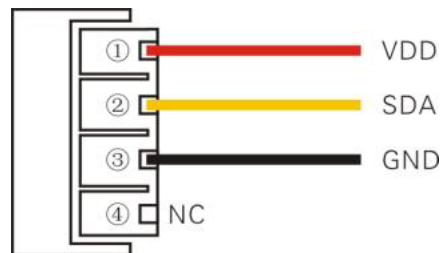
Feature

The AM2305 is a capacitive humidity and high-precision temperature sensor with onboard calibration stored in a microcontroller. It operates with ultra-low power and standard single-bus digital output up to 20 m transmission. Each unit is factory-calibrated for high accuracy, excellent stability, and interchangeable use. Ideal for HVAC, data logging, weather stations, and automated control systems.

| Specifications | |
|---------------------------|---|
| Model | AM2305 |
| Supply Voltage | 3.3–5.5 V (recommended 5 V) |
| Interface | Single-bus digital (SDA tri-state) |
| Humidity Resolution | 0.1 %RH |
| Humidity Range | 0–99.9 %RH |
| Humidity Accuracy | ±2 %RH at 25 °C |
| Humidity Repeatability | ±0.1 %RH |
| Humidity Response Time | <5 s (1/e) |
| Humidity Drift | <0.5 %RH/year |
| Temperature Resolution | 0.1 °C (16-bit) |
| Temperature Range | –40 to +125 °C |
| Temperature Accuracy | ±0.3 °C typical, ±0.4 °C max |
| Temperature Repeatability | ±0.2 °C |
| Temperature Response Time | <5 s (1/e) |
| Temperature Drift | ±0.1 °C/year |
| Transmission Distance | up to 20 m |
| Use Cases | HVAC, data logging, weather station, humidity / temperature control |

Pinouts:

| Pin Name | Type | Description |
|----------|---------------|--------------------------------------|
| VDD | Power Input | 3.3 V–5.5 V supply (recommended 5 V) |
| SDA | Digital Data | Single-bus bidirectional data line |
| GND | Ground | Common ground |
| NC | No Connection | Not used / reserved |



Product Pictures:

