seeed studio

INDUSTRIAL PRODUCT DATASHEET

Temperature-Humidity Sensor-AM2311A (Upgraded Version of DHT22)

Upgraded version of DHT22, the AM2311A sensor combines capacitive humidity and high-precision temperature sensing with digital output and strong anti-jamming for diverse control applications.

SKU	UPDATED	PRICE
101990561	2025-07-30 07:55:03	$4.99(Excl. VAT)



Overview



The AM2311A Temperature-Humidity Sensor includes a capacitive humidity sensor and a high precision temperature sensor with full calibration and digital output via unibus interface. It provides excellent long-term stability, quick response, and strong anti-jamming capability for applications such as HVAC, medical, weather, and consumer goods.

Key Features

- Includes a capacitive humidity sensor and a high precision temperature sensor.
- Full calibration
- Digital output, unibus interface
- Excellent long-term stability
- Quick response and strong anti-jamming capability

Product Gallery







Specification

Typical accuracy (% RH)	± 3
Operating range (% RH)	0 to 99.9
Humi response time(s)	5
Typical accuracy (°C)	± 0.5
Operating range (°C)	-40~80
Temp response time(s)	5
Interface	1-Wire
Supply voltage(V)	3.3~5.5

Parameter	Condition	Min	Typical	Max
Supply Voltage		3.3	5	5.5

Power-consumption	Sleep	2	15	μA
	measuring		1200	μA
	Average		600	μA
Low level output voltage	I OL	0		0
High level output voltage	Rp <25 KΩ	90%		%
Low level input voltage	Decline	0		%
High level input voltage	Rise	70%		%
RPU	VDD = 5V VIN = VSS	1	5.1	KΩ
Output current	Open		8	mA
	Tri-state (turn off)	10	20	μA
Sampling period		2		S

Applications

- **HVAC system**
- **Dehumidifier**
- **Test and inspection equipment**
- **Consumer goods**
- **Automobiles**
- **Automatic control**
- **Data recorder**
- **Weather**
- **Household appliances**
- **Humidity regulation**
- **Medical**
- **Other related temperature and humidity detection and control**

Compliance & Logistics



HSCODE	9025800000
USHSCODE	9025801000
UPC	
EUHSCODE	9013101000
COO	CHINA

Resource Links

- https://www.seeedstudio.com/DHT22-wired-AM2311-temperature-humidity-sensor-Arduino-sensor-p-4195.html
- AM2311A-EN

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com