

INDUSTRIAL PRODUCT DATASHEET

Grove - Laser PM2.5 Dust Sensor - Arduino Compatible - HM3301

Real-time, high-sensitivity PM2.5 dust sensor with Grove interface for accurate, low-power air quality monitoring.

SKU

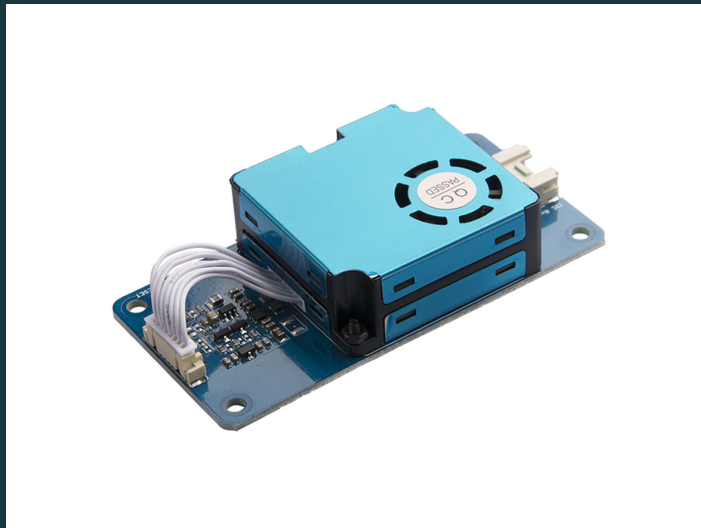
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UPDATED

2026-04-24 02:09:15

PRICE

\$32.90(Excl. VAT)



Overview

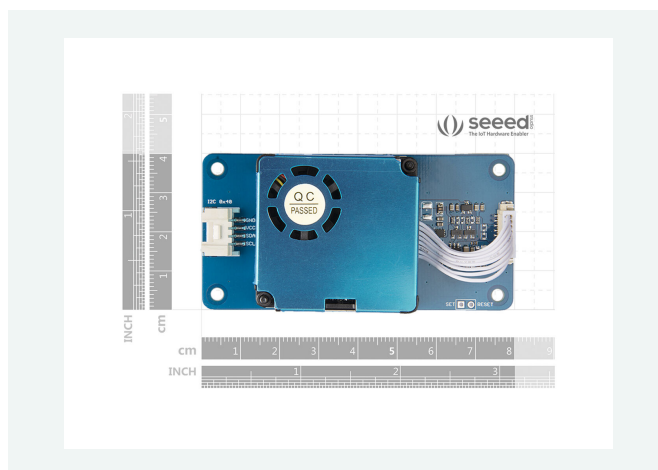
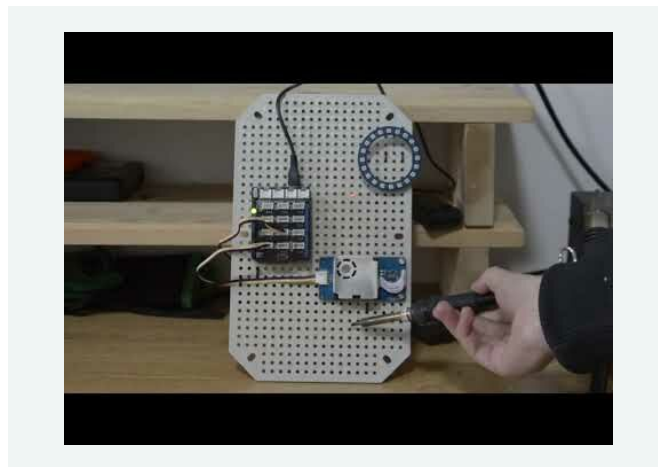
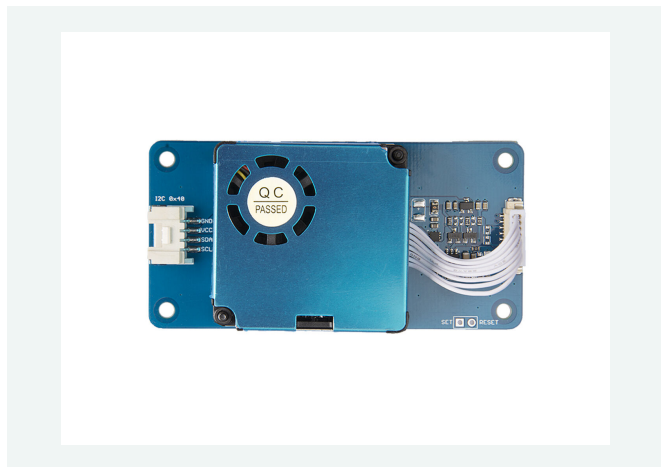


The Grove - Laser PM2.5 Dust Sensor (HM3301) provides real-time, continuous detection of airborne dust particles with high sensitivity for particulates as small as 0.3 μm . Utilizing laser light scattering technology, it delivers accurate, stable readings with low noise and ultra-low power consumption, and features a Grove-compatible interface for easy plug-and-play integration.

Key Features

- **Real-time detection:** Real-time & continuous detection of dust concentration in the air
- **High sensitivity:** High sensitivity on dust particles of 0.3 μm or greater
- **Stable data reading:** Based on laser light scattering technology, readings are accurate, stable, and consistent
- **Low-power:** Low noise and Ultra-low power consumption
- **Grove compatible interface:** The product ensures "Plug and Play" and could be versatile for various applications of Grove

Product Gallery



Specification

Operating Voltage	3.3V / 5V
Operating temperature	-10~60°C
Operating humidity	10%~90%RH (non-condensing)
Particle size	3 channels-- 2.5μm, 5μm, 10μm
Range (PM2.5 standard value)	1~500μg/ m ³ (Effective range) 1000 μg/ m ³ (Maximum range)
Resolution	Concentration: 1μg/ m ³ Counting concentration: 1s/0.1L
Stability time	30 seconds after power-on
Interface	I2C
I2C address	0x40

Part List

Grove - Laser PM2.5 Sensor (HM3301)	1
Grove Cable	1

Compliance & Logistics



HSCODE	9031809090
USHSCODE	9031808085
UPC	841454121794
EUHSCODE	9013101000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/Grove-Laser-PM2-5-Sensor-HM3301.html>
- Grove - Laser PM2.5 Sensor (HM3301) Eagle Files
- Seeed_PM2_5_sensor_HM3301 Software Library
- Datasheet HM3301

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