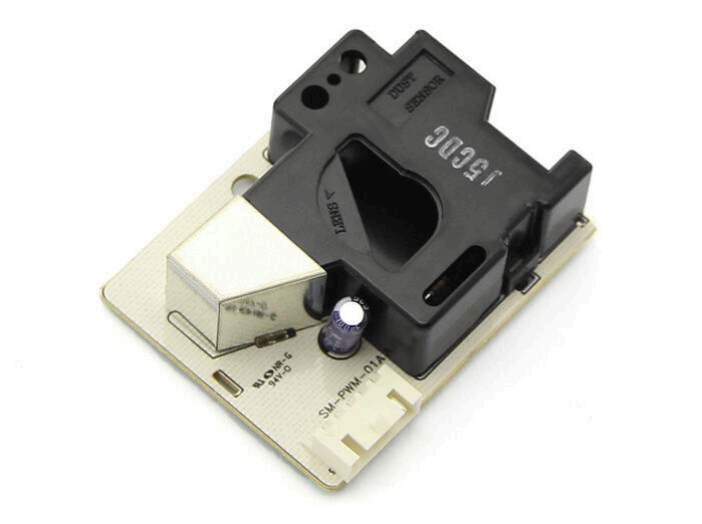
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INDUSTRIAL PRODUCT DATASHEET

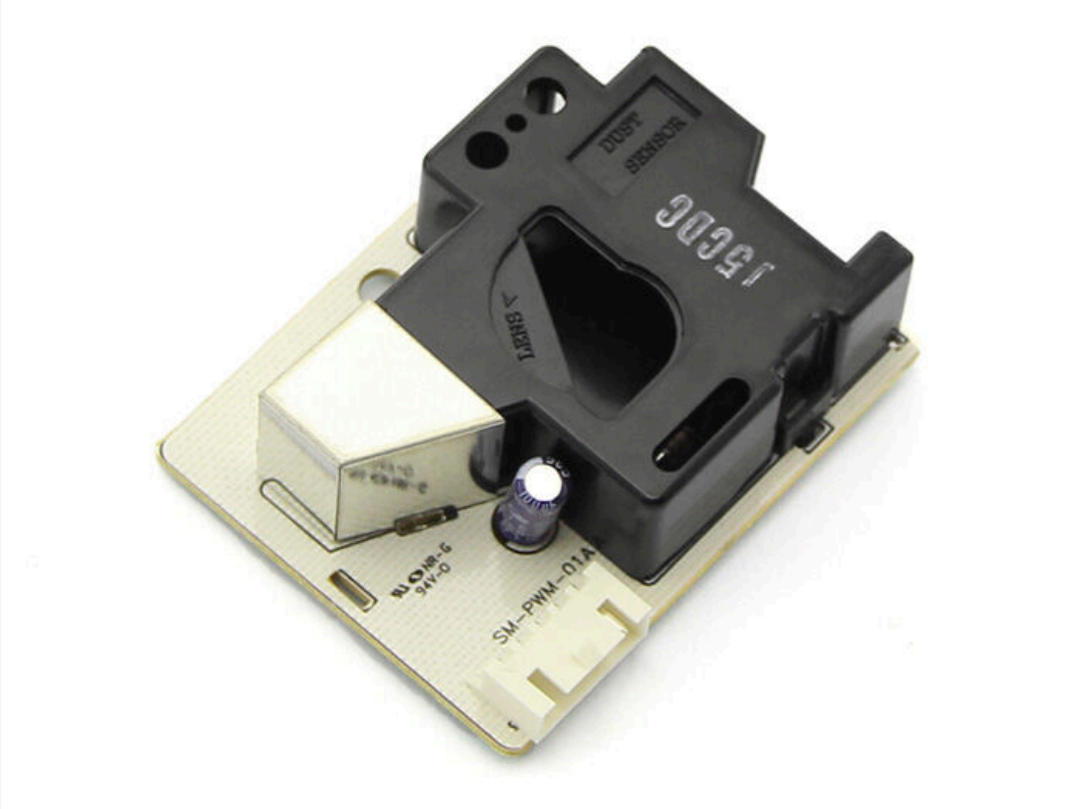
Smart Dust Sensor - SM-PWM-01A

Smart Dust Sensor - SM-PWM-01A: compact optical dust sensor with PWM output that distinguishes cigarette smoke from house dust.

SKU	UPDATED	PRICE
114990092	2024-08-09 02:02:21	$16.95(Excl. VAT)



Overview



The Smart Dust Sensor - SM-PWM-01A detects airborne dust particle concentration using an optical sensing method with an IR LED and photo-sensor. It provides a PWM output and can distinguish small particles like cigarette smoke from larger house dust by pulse pattern analysis.

Key Features

Introduction:

This is a dust sensor that detects the dust particle concentration in air by using optical sensing method. An infrared light emitting diode (IR LED) and a photo-sensor are optically arranged in the device. The photo-sensor detects the reflected IR LED light by dust particles in air.

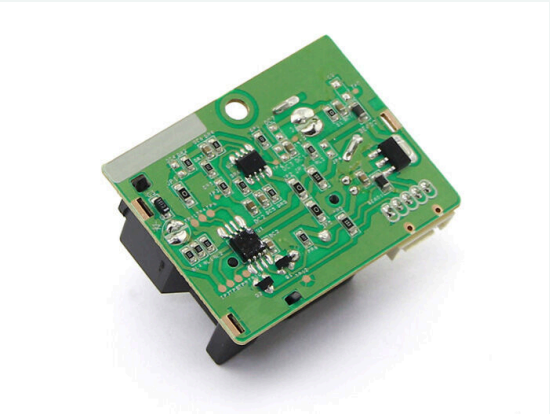
The SMART Dust Sensor can detect the small particles like cigarette smoke and it can distinguish small particles like smoke from large house dust by pulse pattern of signal output.

Features:

- Compact size, light weight (about W59x H46x D18 mm, 23g)
- PWM (pulse width modulation) output (Low pulse output)
- Enable to distinguish small particle of cigarette smoke from large particle of house dust
- Constant forced air convection flow by heater resister in dust sensor
- Lead free and ROHS directive compliant
- Minimum particle size can be detected over 1μm
- (House dust size: avg 20μm, yellow dust size: avg 20um, cigarette dust size: avg 1μm)

Specification:

Product Gallery





Part List

Smart Dust Sensor - SM-PWM-01A	1

Resource Links

- https://www.seeedstudio.com/Smart-Dust-Sensor-SM-PWM-01A-p-2085.html
- Datasheet

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