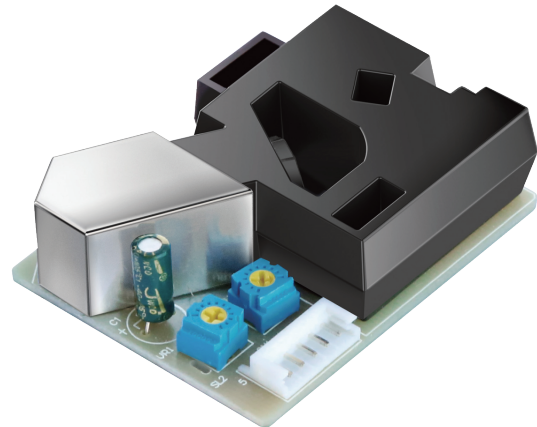


# Counting Type Dust Sensor

## DC0001

### ■ Features

- Reliable performance, long lifespan
- Compact size for flexible installation
- Active gas entry driven by heating component



### ■ Introduction

The DC0001-000 is a dust sensor comprised of an optical sensing system that uses counting method to measure dust concentration. When the airflow carrying dust particles goes through the detection area, the forward scattered light is collected by photoelectric receiver tube. After signal amplification and amplitude discriminating, the PWM pulse width signal is outputted.

In addition to extremely high sensitivity and reliable long-term stability, a built-in heater is used to enable active gas entry. This product also features compact shape, light weight, easy installation and easy maintenance.

### ■ Applications

- |                                       |                       |
|---------------------------------------|-----------------------|
| - Ventilation system                  | - Air quality monitor |
| - Air purifier                        | - Smoke alarm         |
| - Industrial dust particles detection |                       |

## ■ Technical Parameters

<b>Properties</b>	
Particle measuring range	1-2.5 $\mu$ m
Concentration measuring range	0~8000 PCs/283ml
Detectable particle diameter	$\geq 1 \mu\text{g}/\text{m}^3$
Mean time to failure	$\geq 3$ years
<b>Output Format</b>	
Trigger method	Low level pulse
Output	Negative logic pulse output. Hi: about 4V or above; Lo: about 0.7V OP AMP output
<b>Working condition</b>	
Operating environment	-10~+45 °C
Storage temperature	-30~+60 °C
Operating temperature	$\leq 95\%$
Storage Humidity	$\leq 95\%$
<b>Power Supply</b>	
DC Power supply voltage	DC 5V $\pm 5\%$
Working current	$\leq 100\text{mA}$

## ■ Appearance & Dimensions (Unit: mm)

