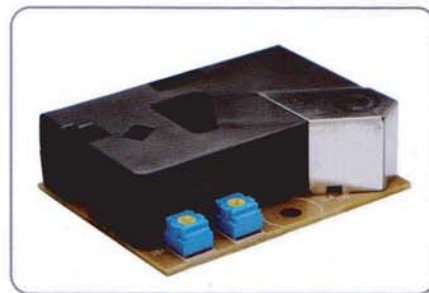


JDSM501 Series

Based on the light scattering method, the highly sensitive optical sensor consistently detects particles such as smoke, house dust and pollen. Pulse output corresponding to the concentration per unit volume of particles can be obtained, using an original detection method based on light scattered on the particle counter.

Particle sensor in combination with air purifier can yield optimum automatic fan speed control function.



FEATURES

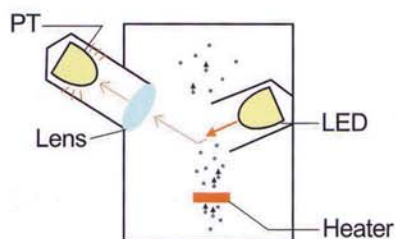
- Stable and sensitive detection of indoor asthma triggers such as cigarette smoke and house dust.
- Air is self-aspirated with the current of the air generation mechanism using a built-in heater.
- Easy maintenance, long-term sensitivity.
- Compact and light, and easy to install.

APPLICATIONS

- Air Purifier, Air Quality Monitor, Air Conditioner, Ventilator

SPECIFICATIONS

Model	JDSM501
Supply voltage	DC 5V±10%
Power consumption	Max. 90mA
Operating range	-10 to 65°C, under 95%RH(without dew condensation)
Recommended storage temperature	-20 ~ 80°C
Dimensions	W59 × H45 × D20(mm)
Particle size detected	1 micro meter and over
Concentration range detected	From clean air to 0.5 to 1 cigarette / room (about 30cu.meter)
Sensor characteristics	The value stays between the upper limit and the lower limit of the standard dust sensor units
Output	PWM (pulse width modulation)
Time for stabilization	About 1 minute after the heater circuit power is turned on

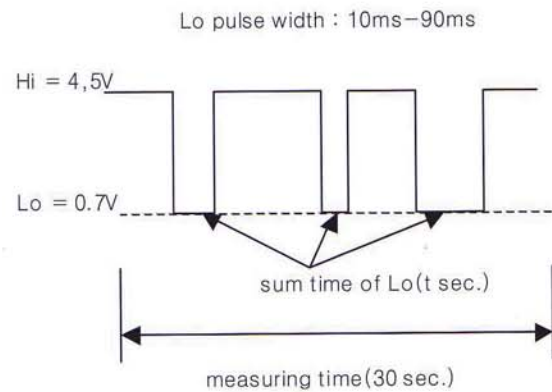
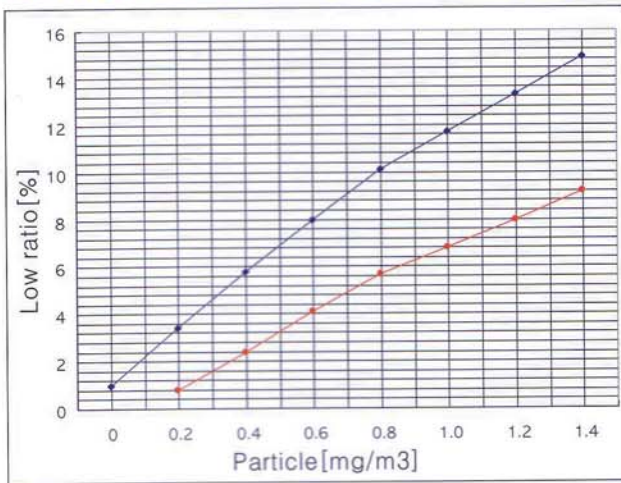


FEATURES

- Heater generating updraft. Infrared light beam from LED is focused with a lens to the sensing point at the center.
- Airborne particles have been taken into the sensor box with the updraft.
- Particle passing through sensing point scatters light, and receptor receives scattered light through the lens and transforms it into a pulse signal.
- Pulse per unit time is proportional to the particle concentration.

JDSM501 Series

● CIGARETTE SMOKE – OUTPUT CHARACTERISTICS



$$\square \text{ Low ratio [\%]} = \frac{t(\text{sec.})}{30(\text{sec.})} \times 100$$

● DIMENSIONS (mm)

