

# Dust Concentration and Sound Level Sensor

**DIG-PM02-12V**

## Description

The dust sensor uses the laser scattering principle to detect the presence of dust particles concentration in the air. It can detect 1.0um, 2.5 um and 10.0 um particles. The sound sensor can measure the level of the noise.

The combination of these two sensors will be very useful for smart cities for monitoring the ambient contamination.

Notable features are:

- High precision, fast response.
- No moving parts, less maintenance.
- Excellent Stability.
- Outdoor and Indoor applications

## Dimensions



All units in mm.

## Electrical Connections

Cable	RS485
Red	V+
Yellow	RS485A
Black	V-
Blue	RS485B

## Technical Specifications

Measured Variable	Range
Sampling Object	1.0, 2.5 and 10 um Optional 100um
Range	0-1000 ug/m <sup>3</sup>
Supply	12-24VDC
Accuracy	3% FS
Noise	30 db - 120 db
Power	< 50mA@24V
Warm Up Time	3 min
Temperature Drift	< 0.2%FS/°C
Response time	Dust < 90s Noise < 1s
Operating Environment	-40 a 80°C / 0 to 100% RH
Main Material	ABS
Protection	IP67
Output	MODBUS-RTU/RS485