



Particulate Matter PM2.5 monitor

For indoor, building application

*PM2.5 + temperature + humidity monitoring, Wall /
Desktop installation, RS485 Modbus output for BMS /
SCADA connection, with color-changing display*

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PARTICULATE MATTER PM2.5 MONITOR

GP25 Series

Product Description:

Particulate matter (PM) is a particle pollution, produced due to many mechanical, chemical, thermal process. These particulate matter are present in many size and so technically classified into two segments:

- PM10: particles size between 2.5 and 10 microns diameter
- PM2.5: particle size small than 2.5 microns.

Smaller the particle the longer it can remain suspended in the air before settling, and more hazardous to health, causing lung problems, cancer, asthma, breathing problems, irritation etc. Smaller the particles, more difficult to remove.

Particulate matter can cause : premature mortality, aggravation of respiratory and cardiovascular disease, aggravated asthma, acute respiratory symptoms, chronic bronchitis, decreased lung function and increased myocardial infection.



Salient Features:

- Highly reliable in-built optical infra-red LED sensor technology for PM2.5 measurement.
- Real time monitor indoor PM2.5 concentration.
- High accuracy temperature & RH measurement
- Temperature, humidity compensated measurement for accurate monitoring
- Nine point calibration
- Real time value and moving average value of PM2.5, temperature and RH value display on LCD.
- Six color change LCD for different environment conditions.
- RS485 interface with Modbus RTU protocol

Product Specifications::

Product Model: GP25-340P

Parameters	Specifications		
Measuring parameters	PM2.5	Air temperature	Air relative humidity
Sensor technology	Optical sensing with an IR LED and a photo-sensor	high precision digital integrated temperature humidity sensor	
Measuring range	0-600 $\mu\text{g} / \text{m}^3$	Temperature: -20 ~ +50°C	Humidity: 0~100% Rh
Display resolution	0.1 $\mu\text{g} / \text{m}^3$	0.01°C	0.01 % Rh
Accuracy	$\pm 10\mu\text{g} + 10\%$ of reading @ 20°C~35°C ,20%~80%RH	$<\pm 0.5^\circ\text{C}$ (at 30°C)	$<\pm 3\%$ Rh
Stability	< 10% in 5 years	<0.04°C / year	<0.5%Rh / year
Installation	Wall mounting		
Storage conditions	0°C ~ 60°C, 5-95% Rh		
Housing	ABS		
IP protection	IP30		
Dimensions	85 x 132 x 37 mm		
Output	RS485 Modbus RTU protocol		
Baud Rate	38400 bps		
Power supply	24VDC		
Certification	CE		