

# G03-PM2.5

## Real-time PM2.5 Monitor

- *Experienced in designing IAQ product for 12 years, long term exportation to Europe and America, powerful performance guaranteed*
- *Real-time detecting indoor PM2.5/PM10, Temperature and relative humidity*
- *Provide Modbus RS485 optional*
- *Six color of LCD backlight colors, corresponding to the China standard of PM2.5 six levels, very intuitive and clear*
- *Wall mounting, or desktop optional*
- *Suitable for residences, offices, small ventilation systems, and etc.*



### Features

- Built in laser dust sensor. Real time monitor indoor PM2.5 concentration.
- Built in high accuracy temperature & RH sensor, monitor indoor air temperature & RH.
- Using our unique technology of compensating method, and up to nine calibration points, to guarantee G03-PM2.5 measurements accuracy in different environments.
- LCD displays the real time measurement and moving average value of PM2 within one hour, as well as real time temperature and RH measurements.
- Special design six colors backlit LCD for six levels of PM2.5 according to the state standard, intuitive and clear.
- Manual or automatically control air cleaning facility according to PM2.5 changes
- long-term security power supply: 5VDC with a power adaptor; direct connection 220 VAC mains
- Option: RS485 interface with Modbus protocol for real time measurements transfer
- User can have a clear intuitive perception of PM2.5 concentrations in the environment, for convenient and reasonable choice in air purification equipment, evaluation of purification effect
- Provide the carbon dioxide, TVOC monitor, applied to the system with fresh air

## Main Applications

- Residential, office and other places of civilian applications
- Residential projects
- Mini-type ventilation system

## Models Guide

| Model          | PM2.5 | Temp/RH | 5VDC Power Supply | 24VDC Power Supply | Output                |
|----------------|-------|---------|-------------------|--------------------|-----------------------|
| G03-PM2.5-300H | ●     | ●       | ●                 |                    | NONE                  |
| G03-PM2.5-340H | ●     | ●       |                   | ●                  | RS485<br>(Modbus RTU) |

## Specifications

| General Data           |  |
|------------------------|--|
| Power supply           | G03-PM2.5-300H: 5VDC with a power adaptor witch connection 220V<br>G03-PM2.5-340H: 24VDC   |
| Work consumption       | 1.2W   |
| Warm-up time           | 60s  |
| Monitor parameters     | PM2.5, air temperature & RH  |
| LCD display            | LCD six backlit, displays six levels of PM2.5 and one hour average value.<br>Green: Top Quality- Grade I<br>Yellow: Good Quality-Grade II<br>Orange: mild level pollution -Grade III<br>Red: medium level pollution Grade IV<br>Purple: seriously level pollution Grade V<br>Maroon: severe pollution - Grade VI |
| Modbus RS485 interface | 19200bps, 15KVa antistatic protective  |
| Storage condition      | 0°C~60°C/ 5~95%RH  |
| Dimensions             | 85mm×130mm×36.5mm  |
| Housing materials      | PC+ABS materials   |
| Net weight             | 198g   |
| IP class               | IP30   |
| PM2.5 Data             |  |
| Built-in sensor        | Laser particle sensor, light scattering method   |
| Measuring range        | 0~600µg/m <sup>3</sup>   |
| Display resolution     | 0.1µg/m <sup>3</sup>   |
| Zero Point Stability   | ±5µg/m <sup>3</sup>  |

|  |  |                             |
|--|--|-----------------------------|
| Measuring accuracy (1h average)            | ±15% @ 25°C, 10%~50%RH   |                             |
| <b>Temperature and Humidity Parameters</b> |  |                             |
| Temperature humidity sensor                | Built-in high precision digital integrated temperature humidity sensor |                             |
| Temperature measuring range                | -20°C~50°C   |                             |
| Relative humidity measuring range          | 0~100%RH   |                             |
| Display resolution                         | Temperature:0.01°C   | Humidity:0.01%RH            |
| Accuracy                                   | Temperature:<±0.5°C @30°C  | Humidity:<±3.0%RH (20%~80%) |
| Stability                                  | Temperature:<0.04°C per year   | Humidity:<0.5%RH per year   |

### *Air quality index of PM2.5 levels*

| Air Quality Levels |             |                   | PM2.5 24h Average Concentration | Effects on Health  |
|--------------------|-------------|-------------------|---------------------------------|--|
| LCD Backlight      | PM2.5 Level | Air Type          | µg/m <sup>3</sup>               |  |
| Green              | Level I     | Very good         | 0-35                            | Good air quality, almost no air pollution  |
| Yellow             | Level II    | Good              | 36-75                           | Acceptable air quality, but some pollutants may has a weak effect on health of a handful of high sensitive people.           |
| Orange             | Level III   | Light pollution   | 76-115                          | The symptom of susceptible people are mild sharpened and healthy people come on an symptom of irritation.                    |
| Red                | Level IV    | medium pollution  | 116-150                         | Further aggravate symptoms of vulnerable groups, it may has an impact on healthy people heart, lungs and respiratory system. |
| Purple             | Level V     | heavy pollution   | 151-250                         | Symptoms of vulnerable groups are further aggravated. Healthy people generally appear symptoms                               |
| Red-brown          | Level VI    | Serious pollution | >251                            | The exercise tolerance of healthy people is reduced with noticeable symptoms, and some symptoms appear ahead of time.        |

### *Different indoor air detectors for different applications*

For different indoor pollution and room purposes, you may need different air quality monitor. Please contact us to know details.

- CO2 monitor/controller
- Carbon monoxide and ozone monitors/controllers
- IAQ monitors with up to 6 parameters detection

More information please contact with our sales.