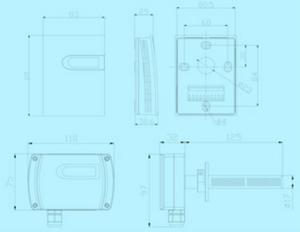
PM2.5/PM10 Particulate Matter Transmitter/Controller





Applications & Features

- PM series transmitters/controllers are designed for monitoring & controlling environment air quality (particulate matter PM2.5 & PM10)
- RSA-MPA/RSA-MP10A is suitable for wall mount and PMD/PM10D is suitable for duct mount
- The sensor has very good long-term stability, consistency accuracy is up to +/-10% readings or +/-10 ug/m³, with realtime response and support continuous acquisition
- MBTF is more than 3 years for continuous service (service life can be up to 8-10 years in typical stable concentration change working conditions and auto(intermittent) work mode), free maintenance
- All electrical terminals are on the inside bottom, avoid any possible destroy to PCB when wiring (for RSA-MPA/RSA-MP10A)
- Digital technology applied, over voltage and reverse polarity protection, high reliability and anti-interference capability
- LCD & touch function keys selectable
- Optional relay output, can set various parameters and functions with LCD and keys, support all alarm or control mode, so the product can be a stand alone controller (for PMW)

Specifications

Sensor: Laser particulate matter sensor, detected particle size 0.3~10 um (PM2.5 & PM10)

Sampling Method: Laser scattering principle

Range: 0~500ug/m³ (measuring range >1000ug/m³)

Accuracy: +/-10 ug/m³ @0~100ug/m³, +/-10% reading @100~500ug/m³ @25°C/50%RH, see accuracy curve

Resolution: 1 ug/m³

Response time: in continuous service mode, sample time < 1s, response time < 10s,

Service Life: MBTF more than 3 years in continuous service mode, service life up to 8-10 years in auto (intermittent) service mode

Output: 4~20mA, 0~10V, RS485/Modbus

 $\textbf{Relay: } 1 \times \text{SPST, } 3A\text{-}30\text{VDC}/250\text{VAC}(\text{PMW}/\text{PM10W})$

Power supply: 16~28VAC/16~35VDC

Load resistance: $\leq 500\Omega$ (Current output), $\geq 2k\Omega$ (Voltage output)

Display: Optional LCD for all models **Keys:** Optional for RSA-MPA or RSA-MP10A only

Working environment: 0~50°C, 0~95%RH (Non-cond.)

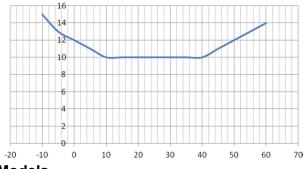
Storage temperature: -30~70°C

Housing: ABS+PC

Protection: IP30 (RSA-MPA/ RSA-MP10A), IP65 (PMD/PM10D)

Weight: 184g (PMW/PM10W), 390g (PMD/PM10D) Approval: CE

Typical consistency accuracy curve:



Models

| | RSA- MPA | | | | Room Transmitter (PM2.5) |
|---------|---------------|---|---|---|---------------------------------|
| Model | RSA- MPD | | | | Duct mount Transmitter (PM2.5) |
| | RSA- MP10A | | | | Room Transmitter (PM10) |
| | PM10D | | | | Duct mount Transmitter(PM10) |
| | | 1 | | | 4~20mA/0~10VDC |
| Output | | В | | | 4~20mA/0~10VDC, RS485/Modbus |
| Relay | | | 0 | | N/A |
| | | | 1 | | 1×SPST |
| | | | | 0 | N/A |
| LCD/Key | | | | 1 | LCD |
| | | | | 2 | LCD, with backlight, touch keys |

All products are factory set to 4-20mA as output default, and can be set to 0-10V by jumper on the PCB