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)
- PMW/PM10W 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 real-time 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 PMW/PM10W)
- 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

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Relay: 1×SPST, 3A-30VDC/250VAC(PMW/PM10W)
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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 PMW or PM10W only

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

Storage temperature: -30~70°C

Housing: ABS+PC

Protection: IP30 (PMW/PM10W), IP65 (PMD/PM10D)

Weight: 198g (PMW/PM10W), 270g (PMD/PM10D) Approval: CE

Typical consistency accuracy curve:



Models

Model	PMW				Room Transmitter (PM2.5)
	PMD				Duct mount Transmitter (PM2.5)
	PM10W				Room Transmitter (PM10)
	PM10D				Duct mount Transmitter(PM10)
Output		1			4~20mA/0~10VDC
		В			4~20mA/0~10VDC,
					RS485/Modbus
Relay			0		N/A
			1		1×SPST
LCD/Key				0	N/A
				1	LCD
				2	LCD, with backlight, touch keys