

MPM30 Series



Infrared PM Sensor

The MPM30 series infrared PM sensor is a passive infrared PM sensor that uses the principle of infrared light scattering. Its light source is an infrared LED light source. The LED emits light and encounters dust to produce reflected light. The photosensitive detector detects the intensity of the reflected light. According to the pulse The size of the signal determines the concentration of dust. The MPM30 series infrared dust sensor adopts scientific structural design, superior dust compensation algorithm, and is extremely cost-effective.

HVAC



Fresh air system



Industrial testing



Smart energy



Smart home



Smart building



Features

- Excellent stability and consistency
- Scientific dust compensation algorithm, high detection accuracy
- Mini and lightweight, easy to integrate into end products
- Small size, low power consumption
- Short response time
- High cost performance and wide application range

Product parameters

Principle	Principle of infrared light scattering
Detect particle diameter	PM0.3~PM10
Detection concentration range	0~1000 $\mu\text{g}/\text{m}^3$
Detection accuracy (@25 \pm 2 $^{\circ}\text{C}$, 50% \pm 10%RH)	$\pm 15\mu\text{g}/\text{m}^3$ (@0~100 $\mu\text{g}/\text{m}^3$) $\pm 15\%$ data (@100~1000 $\mu\text{g}/\text{m}^3$)
Power on stable time	≤ 10 s
Output method	UART/PWM
Working voltage	DC 5V \pm 5%; Voltage ripple below 50mV
Working current	$\leq 15\text{mA}$
Working temperature	-20~75 $^{\circ}\text{C}$
Working humidity	0~95%RH (Non condensation)
Storage environment	-40~85 $^{\circ}\text{C}$, 0~95%RH (Non condensation)
Size	46*34*18.15mm (L \times W \times H)
Lifespan	≥ 8 years

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