MFrontier
美 思 先 端

MPM13 series

Laser PM sensor

The MPM13 series laser PM sensor is based on the principle of laser scattering. Can accurately detect the concentration of suspended particles in the air from 0.3 μm to 10 μm. Scientific air duct design and dust compensation algorithm, high consistency and stability, multiple output forms, easy to integrate into end products.

HVAC

Fresh air system

Industrial testing

Smart energy

Smart home

Smart building

MFrontier
美 思 先 端

Features

- High consistency and stability
- Low power consumption, small size, easy to integrate into end products
- Scientific dust-proof structure, low maintenance cost
- All-metal shell shields electromagnetic interference and resists interference
- Efficient intelligent dust compensation algorithm, fast response speed and high detection accuracy

Product parameters

Principle	Laser scattering
Detect particle diameter	0.3~10μm
Detection concentration range	⩽ 1000μg/m³
Particulate matter concentration resolution	1μg/m³
Detect consistency errors （@ voltage 5.0V 25°C 50%RH）	±10%(@100~500μg/m³)； ±10μg/m³ (@ 0~100μg/m³)
Output method	UART / IIC / PWM
Data interface level	L<0.8@3.3V H>2.7@3.3V
Working voltage	4.5~5.5V，Average voltage：5V
Working current	⩽ 85mA
Stand-by current	⩽ 45μA
Working temperature	-10~60°C
Working humidity	0~99%（no condensation）
Size	49.9*37.9*21.1mm

Shenzhen MemsFrontier Electronics Co.,Ltd.
Web: www.memsf.com
E-mail: info@memsf.com
Add: 3rd Floor B2 Building, Zhaoshangju Technology Park,
Guangming District, 518107, Shenzhen, China