



Mod. **FM-PM**

Dust Sensor PM2.5 – PM10

Main features

- Fast measurement of PM1.0 concentration, PM2.5 and PM10
- Laser scattering principle
- Does not require maintenance
- Compact structure
- Low power, perfect for smart city applications
- Programmable measurement rate
- CE Compliant

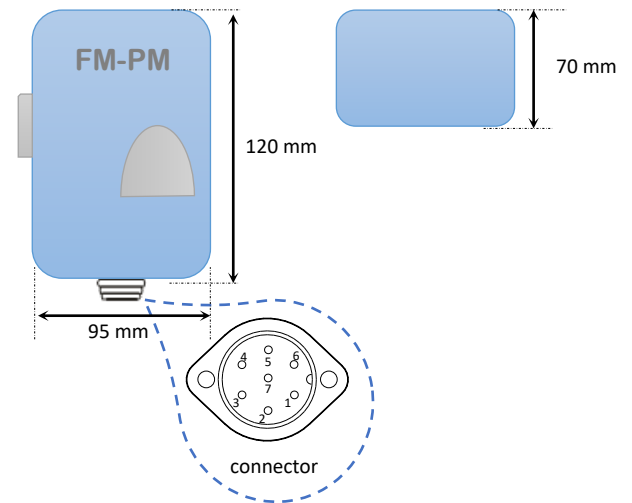
FM-PM it is an instrument for measuring particulate matter, that is, a mixture of solid and liquid particles in the air that can cause health problems. International standards consider particles with diameters less than 10µm (PM10) to be dangerous to humans. However, measuring particle concentration is not an easy measure because it can vary, depending on the position and point of measurement. The measurement is carried out through the **principle of laser diffusion** which does not require maintenance and offers an accurate and repeatable measurement.

The sensor is available with **analog or digital signal output**

Typical measuring range	PM1.0, PM2.5 and PM10: 0... 1000 µg/m ³ (for each pollutant)
Resolution	ø 0.3... 10 µm
Average accuracy	< 5%
Typical linearity	< 5%
Repeatability	~3% with temperature deviation < 0.01 µg/m ³ /°C
Life time	~ 5 years with 5' scan
Warm-up	10-15sec
Technology	Laser scattering
Output signal	2 x 4-20mA, ModBus RTU485
Working temperature	-20 ÷ +70°C
protection	Against polarity reversal and atmospheric discharges
Made in	UV resistant IP53 plastic material
Food and consumption	10 ÷ 28Vdc: <0.6W;
weight	<350g

Dimensions and links

pin	FM-PM
1	N.c.
2	RS485 A
3	Rs485B
4	Gnd
5	Vdc(10÷28V)
6 *	Analog PM10
7 *	Analog PM2.5



How to order

sensor	Dust Sensor	FM-PM		
output	4÷20mA RS485 / Modbus		B C	
fixings	CS05 – 5m sensor-datalogger cable CS10 – 10m sensor-datalogger cable CSxx – Cable of length xx* m to be specified on order,			05 10 Xx

Order code example

FM-PM B 10