

Pulvis Particulate Matter Monitor FD-PM100

Precision outdoor station for measuring PM₁, PM_{2.5}, PM₄, and PM₁₀ concentrations. Features high accuracy, maintenance-free operation, stainless steel housing, air sample conditioning, and real-time data transmission.



Features

- > Real-time measurement of fractions PM_1 , $PM_{2.5}$, PM_4 , and PM_{10}
- High accuracy using OPC technology
- > Resistance to harsh weather conditions
- > Remote data access via wired or wireless network -> Scientific research and educational projects
- Maintenance-free operation and easy integration with telemetry systems
- Continuous 24/7/365 operation with automatic data logging

Applications

- Urban air quality monitoring
- > Smart City and ITS Projects
- Industrial zones
- Background dust levels in protected areas







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Particulate Matter

Measurement method Optical Particle Counter (OPC) laser 660 nm

PM₁

Fractions PM₄

PM₁₀

Range 0...2000 μg/m³

Resolution 1 μg/m³

Accuracy 5 μg/m³

Sample Inlet omni-directional heated inlet

Communication & Data Handling

RS232 (2)

RS485 (2)

Ethernet (2)

Communication Interfaces Wi-Fi (RP-SMA female connector)

Bluetooth (RP-SMA female connector)

GSM/LTE (FME male connector)
GPS (SMA female connector)

USB-A

Control Outputs 6 programmable output channels

internal memory

Data storage SD card

USB







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Operating System

Linux OpenWRT

Power Supply

Supply voltage 230 VAC or 12 VDC

Power consumption 20 W with heating inlet 4.5 W without heating

Surge protection Yes

Environmental

Operating temperature range -30...50 °C

Operating humidity range <99% RH (non-condensing)

Compliance CE Declaration

Physical

Ingress Protection (IP) IP66

Dimensions $670 \times 300 \times 215 \text{ [mm]}$

Weight 11.7 kg



