NTP semiconductor

Outdoor Air Monitor Quality Sensor (PM2.5, PM10)

ES101PM

High measurement accuracy | High performance processor | Multiple probes available | Warm and wet use | Superior performance long-term stability
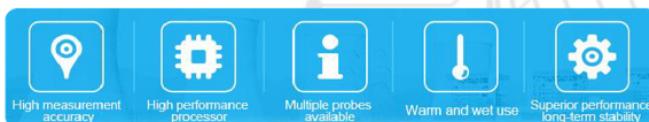
Wide Measuring Range, High Reliability

- 1000 ug/m3 for PM2.5, PM10
- I.R. Laser Detective Technology

Std. Modbus RTU RS-485, Wide Power Rang

- 2-Wire RS-485
- 10~30Vdc Power Input

High Grade Enclosure Protection

- IP54 Grade Protection, ABS Plastic, UL94V0 Anti-fire
- Water-Proof, Anti-Dust with Out-Door Shelter

Optional IoT Router and Cloud Platform

- Support Modbus to connect optional NBIoT Gateway W WLAN-NB for one or many sensors
- Real-time online monitoring, analysis, reporting
- Remote cloud security and visual management

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Features & Benefits

PM2.5/10 measurement range	0~1000μg/m3
Resolution	1μg/m3
Accuracy	10%
Signal output	RS485 2-wire output (Modbus protocol)
Stability	±40ppm +3%FS (25°C)
Working Environment	-10~+50°C, 0-80%RH
Stability	< 7% Signal / Year
Operating Voltage	10~30VDC
Power consumption	< 1.2W
Working Environment	-20~+60°C, 0-80%RH
Response time	< 90 seconds
System Pre-Heat Time	≤ 2 Min.
Dimension & Installation	85 x110 x 44mm; Wall Mounting

Register Address	PLC or Configuration Address	Content	Description
0000 H	40001	PM2.5	Range: 0~1000μg/m3 : Upload real data
0001 H	40002	PM10	Range: 0~1000μg/m3 : Upload real data
07D0 H	42001	Slave ID	1 ~ 254 (Factory Default 1)
07D1 H	42002	Baud Rate	0=2400 1=4800 2=9600(Default)

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