

RK300-02 Dust Concentration Sensor



RK300-02 Dust Sensor using laser scattering principle, detecting the existence of dust particle concentration in the air, the minimum can detect 1.0um particles, has a good consistency and stability. According to different usage environment, there are indoor type and outdoor type to select.

FEATURES

- High Sensitivity
- Fast response
- Low power consumption
- Excellent stability
- Long service life



Indoor



Outdoor

APPLICATIONS

- Air quality monitoring
- Smart home
- Warehousing
- Public place
- Workshop
- Clear room

TECHNICAL SPECIFICATION

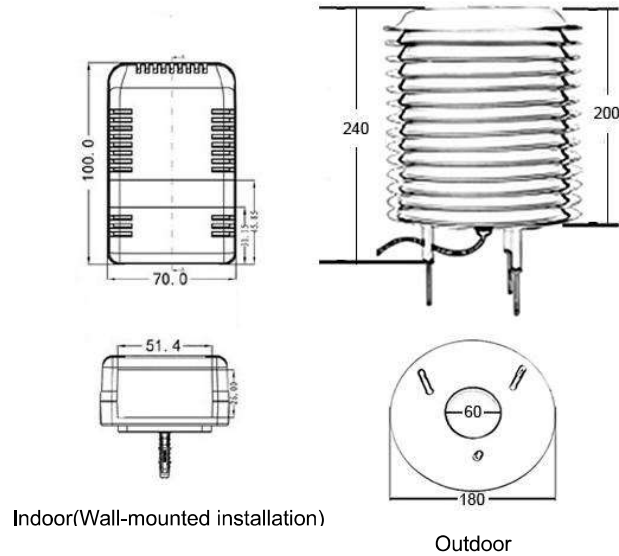
| Item | Technical Specification |
|-----------------------|----------------------------------|
| Sampling object | PM1.0, PM2.5, PM10 Concentration |
| Range | 0-1000ug/m ³ |
| Accuracy | ±3%FS@25°C |
| Supply | 5VDC, 12-24VDC |
| Output | 4-20mA, 0-5V, 0-10V, RS485 |
| Power Consumption | <50mA@24V(4-20mA) |
| Warm Up Time | 3min |
| Response Time | <90s |
| Temperature Drift | ≤0.2%FS/°C |
| Stability | <±2%FS |
| Repeatability | <±1%FS |
| Operating Temperature | -20°C~+50°C@15-80%RH |
| Storage | -40-60°C@20%-90%RH |
| Shell material | ABS |

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DIMENSION

Unit:mm



PARAMETER SELECTION TABLE

| Remark | Series | Type | Measuring object | Indoor /Outdoor | Supply | Output | Cable Length | |
|--------|--------|------|------------------|-----------------|--------|--------|--------------|--------------------------------|
| RK | | | | | | | | |
| | 300 | | | | | | | |
| | | 02 | | | | | | |
| | | | A | | | | | PM1.0 |
| | | | B | | | | | PM2.5 |
| | | | C | | | | | PM10 |
| | | | D | | | | | PM2.5&PM10 |
| | | | E [Ⓞ] | | | | | PM1.0&PM2.5&PM10 |
| | | | | A | | | | Indoor |
| | | | | B | | | | Outdoor(with radiation shield) |
| | | | | | A | | | 5V |
| | | | | | B | | | 12-24V |
| | | | | | X | | | Other |
| | | | | | | A | | 4-20mA |
| | | | | | | B | | 0-5V |
| | | | | | | C | | 0-10V |
| | | | | | | D | | RS485 |
| | | | | | | X | | Other |
| | | | | | | | 2000 | Units:mm (typ) |
| | | | | | | | 3000 | Units:mm |
| | | | | | | | ... | Units:mm |

ⓄMeasure 3 parameters is only RS485 output.

Example: RK300-02BABA2000 PM2.5, Indoor, 12-24V, Output:4-20mA, Cable Length:2m.

