

Product Information

SM-ND-10A series products are dust sensors that can measure air quality by detecting dust over 1 μ m in the surrounding environment. Compared to existing products, the durability and precision of the product against power noise have been improved from 30% to 15%. In addition to the existing PWM method, UART communication is supported by default. note. I2C communication is optional.



Electrical Characteristic

characteristic	Rating
Detectable particle size	approx. 1 μ m (minimum.)
Detectable range	800,000 PCS/ft ³ +/-15% uniformity at 400,000pcs/cubic feet dust concentration.
Supply voltage	DC 5 \pm 10%, Ripple <100mV at 60HZ
Current Consumption	< 110 +5% mA
Out put	(P1,P2) Hi : > 4.5V, Lo : <0.7V, Negative Logic Pulse output UART
Operating Temp. Range	-10~45 $^{\circ}$ C
Operating Humi. Range	95%RH or less (without dew condensation)
Storage temperature	-30~60 $^{\circ}$ C
Power up time	60 Sec
Dimensions	59(W)x H45(T)x D22(D) mm
weight	23g

Absolute Maximum Ratings

characteristic	Rating
Supply voltage	-0.3 to + 7.0
Operating temperature	-10 to 60
Storage temperature	-30 to 80

Connector Pin Configuration

Connector : YMAW 025-05P

1. COMMON (GND)
2. Output (P2/Low Pulse Signal) (active low or UART TXD)
3. Input (5V DC / 90mA)
4. Output (P1/Low Pulse Signal) (active low or UART RXD)
5. No Connection

Application Ideas

- ✓ Air Purifier
- ✓ Air Quality Monitor
- ✓ Air Conditioner
- ✓ Ventilator
- ✓ Smoke type Fire alarm applicator
by different sensor adjustments
(customer option)

Product Inquiry

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