

## Product Information

SM-PWM-03A-G series products are sensors that can simultaneously measure dust and TVOC GAS over 1 $\mu$ 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 basically supported.



## Electrical Characteristic

characteristic	Rating
Detectable particle size	approx. 1 $\mu$ m (minimum.)
Detectable range	800,000 PCS/ft <sup>3</sup> +/-15% uniformity at 400,000pcs/cubic feet dust concentration.
Gas Detectable range	Ethanol gas 0~80PPM
Supply voltage	DC 5 $\pm$ 10%, Ripple <100mV at 60HZ
Current Consumption	< 190 mA
Out put	(P1,P2) Hi : > 4.0V, 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	Dust : 60 Sec GAS :180 Sec
Dimensions	59(W)x H45(T)x D22(D) mm
weight	26g

## 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 : YMAW025-05R

1. COMMON (GND)
2. TVOC (Analog)
3. Input (5V DC / 190mA)
4. Output (P1/Low Pulse Signal) (active low or UART RXD)
5. Output (P2/Low Pulse Signal) (active low or UART TXD)

## 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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