

ZH03 is a universal and miniaturized laser dust sensor module. By utilizing the principle of Mie scattering, dust particles present in the air can be detected. Through professional algorithms and calibrated detection processes, it has good consistency and stability. The sensor has the ability to output both serial port output and PWM output simultaneously, making it convenient to use. Small size, easy to integrate applications.

Features:

Consistent

Real-time response

Accurate data

Low power consumption

Minimum resolution particle diameter $0.3\mu\text{m}$

Application:

Air purifier,

Fresh air system

Portable instruments

Air Quality Supervision

Measuring equipment, air conditioning, smart home equipment and other places.

Parameter:

Detection particle size range: $0.3\text{-}10\mu\text{m}$

Effective range: $0\text{-}1000\mu\text{g}/\text{m}^3$

Detection interval; 1s

PM2.5 detection accuracy: $0\text{-}100\mu\text{g}/\text{m}^3$: $\pm 15\mu\text{g}/\text{m}^3$; $101\text{-}1000\mu\text{g}/\text{m}^3$: $\pm 15\%$

reading (test conditions: $25 \pm 2^\circ\text{C}$, $50 \pm 10\%\text{RH}$,

TSI8530, Cigarette, GBT18801-2015)

Power-on stabilization time: 30s

Output data: UART_TTL output (3.3V level, default); PWM output (3.3V level, default)

Working voltage: 4.9V ~ 5.5V (DC)

Working current : <120mA

Sleep current: <20mA

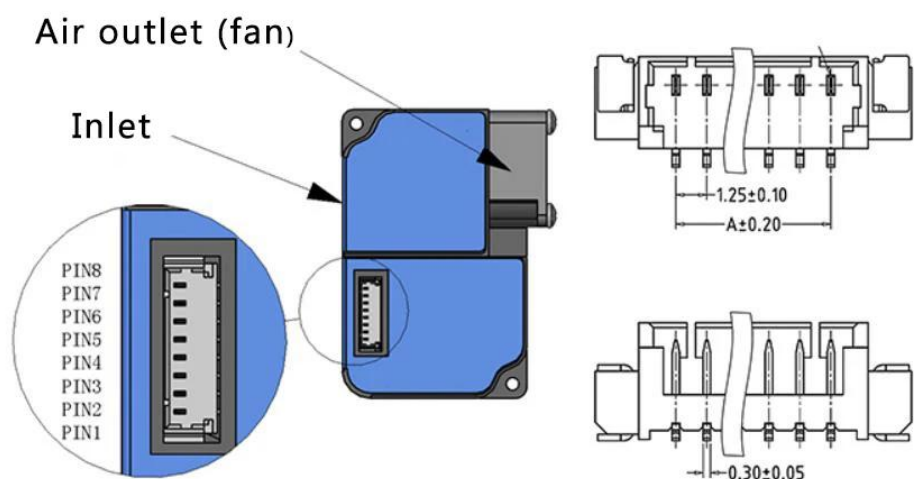
Response time: T90<45s

Working humidity: 0~80%RH (no condensation)

Working temperature: -10~50°C

Storage temperature: -30 ~ 70 ° C

Dimensions : 50 × 32.4 × 21mm (L × W × H)



Number	Name	Description
PIN1	VDD	DC +5V
PIN2	GND	GND
PIN3	-	NC
PIN4	RXD	Serial port reception (TTL@3.3V)
PIN5	TXD	Serial port transmission (TTL@3.3V)
PIN6	-	/
PIN7	-	NC
PIN8	PWM	TTL@3.3V