

# Air Quality Sensor for Environmental Monitoring

This air quality sensor offers high reliability and a long service life. It is suitable for integration into various monitoring systems to detect pollutants and particulate matter.



## Product Overview

### High-Precision Automotive Air Quality Sensing

This high-reliability air quality sensor is specifically engineered for real-time PM2.5 monitoring within automobile passenger compartments. Designed for seamless integration into vehicle air conditioning systems, it offers a long service life and consistent performance. The sensor provides precise environmental data to ensure a healthy and comfortable cabin environment for passengers.

## Key Performance Metrics

### Performance Highlights

12 V

Rated Voltage

200 Hz

PWM Frequency

500 ug/m<sup>3</sup>

Max Detection Range

## Technical Specifications

### 产品特点 FEATURES

01 额定电压12V  
Rated voltage 12V

02 具有使能控制端  
With enable control end

03 输出PWM波形, 频率200Hz  
Output PWM waveform, frequency 200Hz

04 PM2.5浓度有效值低电平占空比  
10%-85%,代表0-500ug/m<sup>3</sup>  
PM2.5 concentration effective value  
low level duty cycle 10% - 85%,  
representing 0-500ug / m<sup>3</sup>

### 应用领域 APPLICATION

• 用于汽车空调系统, 实时检测乘客舱内  
PM2.5的浓度值  
Used for automobile air conditioning system,  
real-time detection of PM2.5 concentration  
in passenger compartment

Detailed technical specifications including PWM output details and automotive application scope.

Rated Voltage	12 V
Output Signal Type	PWM Waveform
PWM Frequency	200 Hz
Effective Duty Cycle	10% - 85% (Low Level)
PM2.5 Concentration Range	0 - 500 ug/m <sup>3</sup>

## Features & Control

### Control Features

- Enable control end included
- Real-time PM2.5 concentration detection
- High reliability sensing element
- Long service life design

## Applications

### Primary Use Case

Automobile Air Conditioning • Passenger Compartment Monitoring • Environmental Analysis

## Physical Characteristics

### Design Characteristics

Compact, Energy-Efficient, Robust Housing, Precise