

IOT-S300AQ

RS485 Air Quality Sensor for PM2.5 and PM10 Detection

The IOT-S300AQ air quality sensor is designed based on the principle of laser scattering and is mainly used to detect the PM 2.5/PM10 particle content in the atmosphere. The product adopts high-sensitivity gas detection probe, with stable signal, high precision, wide measuring range and long transmission distance. It is suitable for air quality environmental monitoring in factories, schools, commercial buildings, construction sites and other places.

Features

- Laser scattering sensing technology, stable and reliable performance
- Wall-mounted shell, easy to install
- High measurement accuracy and fast response speed
- Communication method: Modbus RTU communication protocol, RS485 digital output



Scope of application

- Weather, ropeway, ambient air quality monitoring
- Greenhouse, breeding, air conditioning and energy saving monitoring
- Air quality monitoring in agriculture, medical care, clean space and other fields

Technical Parameters

Measurement type	PM2.5	PM10	
Measuring range	0~500ug/m3	0~1000ug/m3	
Signal output	4~20mA 0~5VDC 0~10VDC RS485 output (Modbus protocol)		
Operating Voltage	10~30VDC	Power consumption	Analog signal: 1.2W RS485: <0.5W
Precision	± 10 %	Repeatability	< 1%FS
Resolution	1ug/m3	Working environment	-20°C ~+60°C, 0%RH~80%RH
Responding speed	≤90s	Preheat time	≤2min
Device baud rate	2400, 4800, 9600, 19200, 38400, 57600, 115200 optional, default 9600		
Byte format	8 data bits, 1 stop bit, no parity		
	Communication address: default is 1 Support function code: 03		
Electrical connectios	Direct lead		

Product size and wiring method

