SEM224 Air quality PM2.5/PM10 sensor

FEATURES

- Wall-mounted housing for easy installation
- High measurement accuracy and fast response
- The range of PM2.5 and PM10 is 0~1000ug/m3, and the resolution is 1ug/m3;
- Unique dual-frequency data acquisition and automatic calibration technology, the consistency can reach ±10%;
- Adopt advanced laser anti-attenuation technology to ensure the long-term stability of the equipment.
- Communication method: Modbus RTU communication protocol, RS485 digital output

OVERVIEW

SEM224 industrial grade general particle concentration transmitter adopts the principle of laser scattering measurement and sieves through unique data dual-frequency acquisition technology to obtain the number of particles of equivalent particle size per unit volume, and uses a scientific and unique algorithm. Calculate the mass concentration of the particles with the equivalent particle size per unit volume, and output the data through the ModBus-RTU protocol with the 485 interface. It can be used in outdoor weather stations, dust monitoring, libraries, archives, industrial plants and other places that require PM2.5 or PM10 concentration monitoring.
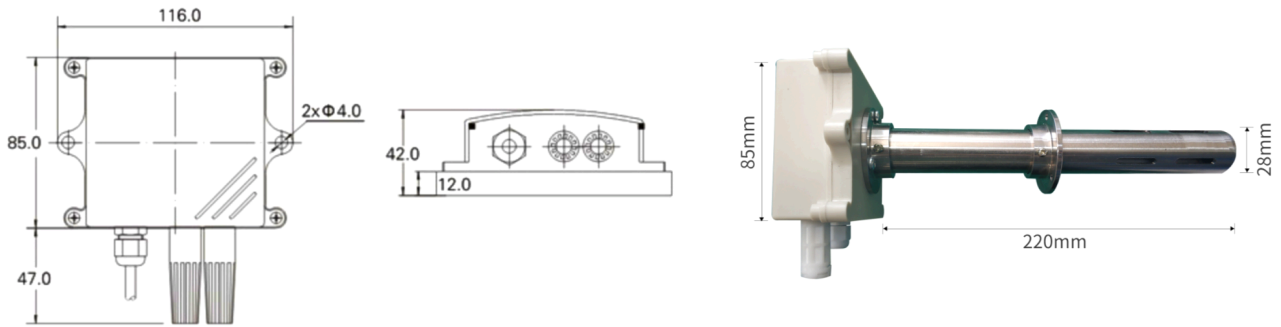
APPLICATION

- Meteorological, ropeway, ambient air quality monitoring
- Greenhouse, aquaculture, air conditioning and energy conservation monitoring Air quality monitoring in areas such as agriculture, health care, and clean space.

SPECIFICATION

DC power supply (default)	10~30V DC	
Power consumption	RS485 output	0.4W
	Current output/Voltage output	1.2W
Accuracy	±10% (@500ug/m3,60%RH,25°C)	
Range	PM2.5: 0~1000ug/m3, PM10: 0~1000ug/m3	
Resolution	1ug/m3	
Response time	≤90S	
Signal output	485 signal output, 4~20mA current output, 0~5V/0~10V voltage output	
Warm-up time	≤2min	
Transmitter circuit operating temperature and humidity	-20°C~+60°C, 0%RH~95%RH non-condensing	
load capacity	Voltage output	Output resistance≤250Ω
	Current output	≤600Ω
Communication Interface	485 communication (modbus) protocol Baud rate: 2400, 4800 (default), 9600 Data bit length: 8 bits Parity check method: none Stop bit length: 1 bit Default ModBus communication address: 1 Support function code: 03	

E-mail: info@cdsentec.com   www.cdsentec.com

DIMENSION

ORDER CODE

SEM224	Air quality PM2.5/PM10 sensor				
	CODE	Types			
	A	Wall-mounted type			
	B	Pipe line type			
		CODE	Function		
		A	PM2.5		
		B	PM10		
		C	PM2.5+PM10		
			CODE	Output	
			1	485 (Modbus protocol) output	
			2	0~5V	
			3	0~10V	
			4	4~20mA	
			5	Lora	
			6	GPRS	
			7	Ethernet	
			8	WIFI	
			9	NB-IOT	
				CODE	Relay
				0	Without relay control
				1	One relay control
SEM224	W	A	4	0	Order example