

Air and gas sensor

Model ES-A230



Main features

- High-precision imported chip
- A variety of measurement elements, and can integrate up to 11 measurement elements at the same time
- Ceiling mounted or wall mounted optional
- Anti-interference modules are added to prevent electromagnetic interference
- Supports secondary development and provides routines for free
- Wide voltage range of 10~30V

Compliance

The electromagnetic compatibility in accordance with the following applicable directives:

EMC 2014/30/EU

Electromagnetic Compatibility

EMC 2014/35/EU

Electromagnetic Compatibility

Introduction

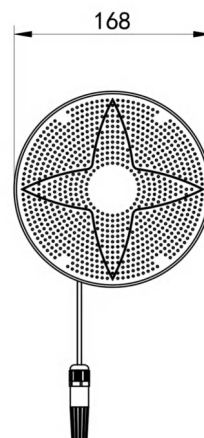
ES-A230 is an air environment multi-element transmitter independently developed by our company, which is used to detect temperature, humidity, PM2.5, PM10, atmospheric pressure, light, noise, TVOC, CO2, formaldehyde, O3, CO in the air environment, CH4, O2, SO2, NO2, H2, H2S, NH3 and other elements, basically covering various indicators reflecting air quality.

The transmitter adopts imported sensor and control chip, which has the characteristics of high precision, high resolution and good stability. The equipment adopts wide voltage 10-30V DC power supply, 485 signal output, standard Modbus-RTU communication protocol, ModBus address can be set, baud rate can be changed, the communication distance is up to 2000 meters. Widely used in building HVAC, building energy saving, smart home, schools, hospitals, airport stations and other places.

Application

It is widely used in building automation, telecommunication rooms, warehousing and logistics, shopping malls, hotels, cinemas, museums, theaters, agricultural greenhouses, hospitals, clean workshops and other fields that need to measure air quality.

Dimension



Unit:mm

Specification

Parameters	Range	Resolution	Accuracy
Temperature	-40°C~+120°C	0.1°C	±0.5°C(25°C)
Humidity	0~100%RH	0.1%RH	±3%RH(60%RH,25°C)
Air pressure	0~120Kpa	0.1Kpa	±0.15Kpa@25°C75Kpa
Illuminance	0-200,000 Lux	1Lux	±7%(25°C)
Noise	30-130db	0.1dB	±3%F.S
PM2.5 / PM10/PM1.0	0~1000ug/m3	1ug/m3	±10%
TSP/PM100	0~20000ug/m3	1ug/m3	±3%F.S
TVOC	0~60000ppb	1ppb	±8%FS±125ppb
CO2	0~5000ppm	1ppm	±(40ppm+ 3%F-S)
Formaldehyde	0~5ppm	0.01ppm	±5%FS
Ozone	0~10ppm	0.01ppm	±6%FS
O2	0~25%Vol	0.1%Vol	±3%FS
H2S	0~100ppm	1ppm	±3%FS
CH4	0~100%LEL	1%LEL	±5%FS
CO	0~1000ppm	1ppm	±3%FS
NO2	0~20ppm	0.1ppm	±3%FS
SO2	0~20ppm	0.1ppm	±3%FS
H2	0~1000ppm	1ppm	±3%FS
NH3	0~100ppm	1ppm	±2%FS
Power supply	DC 10-30V (default)		
Power consumption	1.5W (24V DC power supply)		
Work environment	Temperature - 10 °C - 55 °C; humidity 0 ~ 95% RH, non condensing		
Signal output	RS485 output (standard Modbus RTU protocol), analoge output, RJ45		
Product material	ABS		
Installation method	Wall hanging, ceiling		

Order guide

ES-A230	Air and gas sensor		
	CODE	Functions	
	XXX..	Temperature, Humidity, PM2.5, PM10, Air Pressure, Light, Noise, TVOC, CO2, Formaldehyde, O3, CO, CH4, O2, SO2, NO2, H2, H2S, NH3 (<i>List the functions when order</i>)	
		CODE	Signal output
		XX	RS485, analoge output, RJ45
ES-A230	THPM	RS485	Order example