

SEM227 LOUVER VERSATILE SENSOR
MAIN FEATURES

- One-piece shutter box structure
- High quality anti ultraviolet material, long service life, small volume and light weight;
- It integrates TVOC, CH₂O, O₃, oxygen, H₂S, methane, carbon monoxide, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), hydrogen (H₂), ammonia and other measurement elements;
- High sensitivity probe is adopted, and the key parts are equipped with imported devices, which has the characteristics of wide measurement range, good linearity and good waterproof performance;
- Electrochemical and catalytic combustion sensors are used in the gas unit, which has excellent sensitivity and repeatability.
- TVOC measurement unit adopts high sensitivity gas detection probe imported from abroad, with mature technology and high performance signal acquisition circuit, which has stable signal and high accuracy.

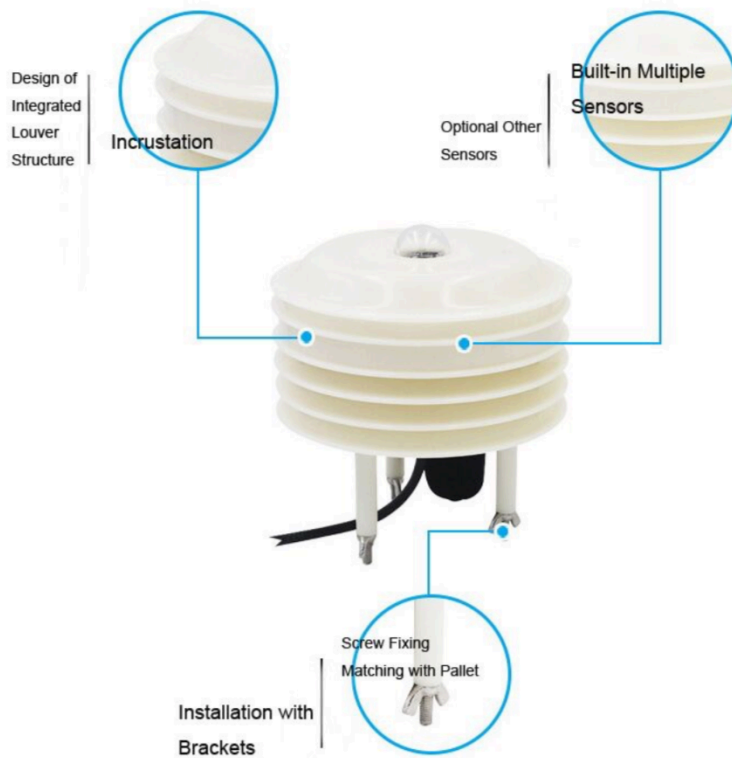

SPECIFICATION

Parameters	Range	Resolution	Accuracy	Preheating time
Air temperature	-40°C~+120°C	0.1°C	±0.5°C(25°C)	≤2min
Air humidity	0~100%RH	0.1%RH	±3%RH(60%RH,25°C)	≤2min
Air pressure	0~120Kpa	0.1Kpa	±0.15Kpa@25°C75Kpa	≤2min
Illuminance	0-200,000 Lux	1Lux	±7%(25°C)	≤2min
Noise	30-130db	±3%F.S	0.1dB	≤2min
PM2.5 / PM10/PM1.0	0~1000ug/m3	±10%	1ug/m3	≤2min
TSP/PM100	0~20000ug/m3	±3%F.S	1ug/m4	≤2min
TVOC	0~60000ppb	1ppb	±8%FS±125ppb	≤2min
CO ₂	0~5000ppm	1ppm	±(40ppm+ 3%F-S)	2min
Formaldehyde	0~5ppm	0.01ppm	±5%FS	≥5 minutes
Ozone	0~10ppm	0.01ppm	±6%FS	≥5 minutes
O ₂	0~25%Vol	0.1%Vol	±3%FS	≥5 minutes
H ₂ S	0~100ppm	1ppm	±3%FS	≥5 minutes
CH ₄	0~100%LEL	1%LEL	±5%FS	≥5 minutes
CO	0~1000ppm	1ppm	±3%FS	≥5 minutes
NO ₂	0~20ppm	0.1ppm	±3%FS	≥5 minutes
SO ₂	0~20ppm	0.1ppm	±3%FS	≥5 minutes
H ₂	0~1000ppm	1ppm	±3%FS	≥5 minutes
NH ₃	0~100ppm	1ppm	±2%FS	≥5 minutes
Power supply	DC 10-30V (default)			
Max. power	1.2W			
Test parameters	TVOC, formaldehyde, O ₃ , Co, CH ₄ , O ₂ , SO ₂ , NO ₂ , H ₂ , H ₂ S, NH ₃			
Work environment	Temperature - 10 °C - 55 °C; humidity 0 ~ 95% RH, non condensing			
Signal output	RS485 output (standard Modbus RTU protocol), analogue output, RJ45			
Product material	ABS			
Installation method	Bracket installation			

OUTLINE CONSTRUCTION

• Product design

Specialized sensors designed for environmental monitoring in meteorological or agricultural production processes, the instrument can continuously monitor various environmental parameters such as carbon dioxide and ambient temperature and humidity.



• Waterproof and dustproof



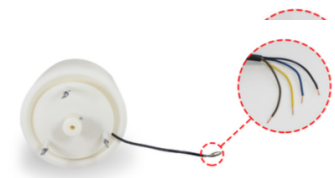
Designed with rain and snow, it can be used for outdoor environmental data monitoring.

• Carrier mounting

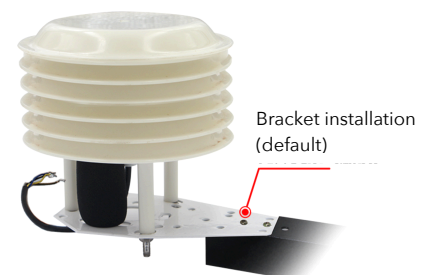


It is mounted by a tractor and screwed. Easy to operate, it can be used in more conditions.

• Efficient transmission



High-quality four-core cable, high efficiency of data transmission, ensuring stable and reliable data transmission.



ORDER CODE

SEM227	LOUVER VERSATILE SENSOR		
	CODE	Function code	
	A	Temperature and humidity	
	B	Noise	
	C	illumination	
	D	atmospheric pressure	
	E	PM2.5/PM10	
	F	carbon dioxide (CO ₂)	
	G	TVOC	
	H	ozone(O ₃)	
	I	oxygen(O ₂)	
	J	ammonia(NH ₃)	
	K	hydrogen sulfide(H ₂ S)	
	L	sulfur dioxide(SO ₂)	
	M	carbon monoxide(CO)	
	N	Nitrogen dioxide(NO ₂)	
		CODE	Output
		1	RS485
		2	4~20mA
		3	0~10V
		6	RJ45 network port
SEM227	A+M	1	Order example

Remarks: if measuring parameters are over 3, output only support RS485

APPLICATION

