

SEM240U ALL IN ONE MULTI-FUNCTION SENSOR

OVERVIEW

SEM240U air sensor adopts imported digital temperature and humidity sensor, which has been finely calibrated during production, and the calibration data is stored in the internal memory. The sensor has the characteristics of digital output, which can be completely interchanged, does not need to go through a complicated verification and calibration process, and is outstanding in measurement accuracy, linearity, repeatability, interchangeability, and consistency.

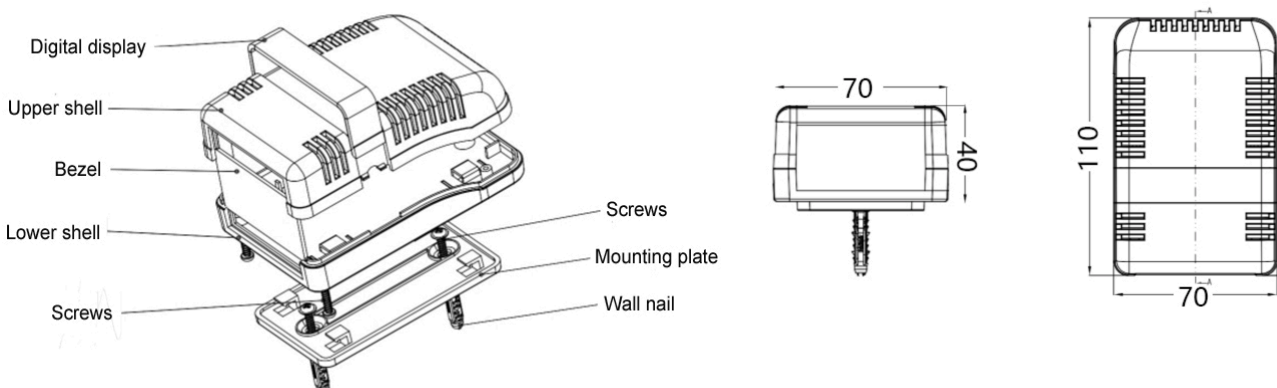
Using non-dispersive infrared (NDIR) principle, electrochemical sensor and high-performance microprocessor, built-in temperature sensor for temperature compensation, can measure atmospheric temperature and humidity, PM1.0/2.5/10, CO₂, oxygen concentration, sulfur dioxide concentration, hydrogen sulfide Concentration, ammonia concentration and formaldehyde, etc.



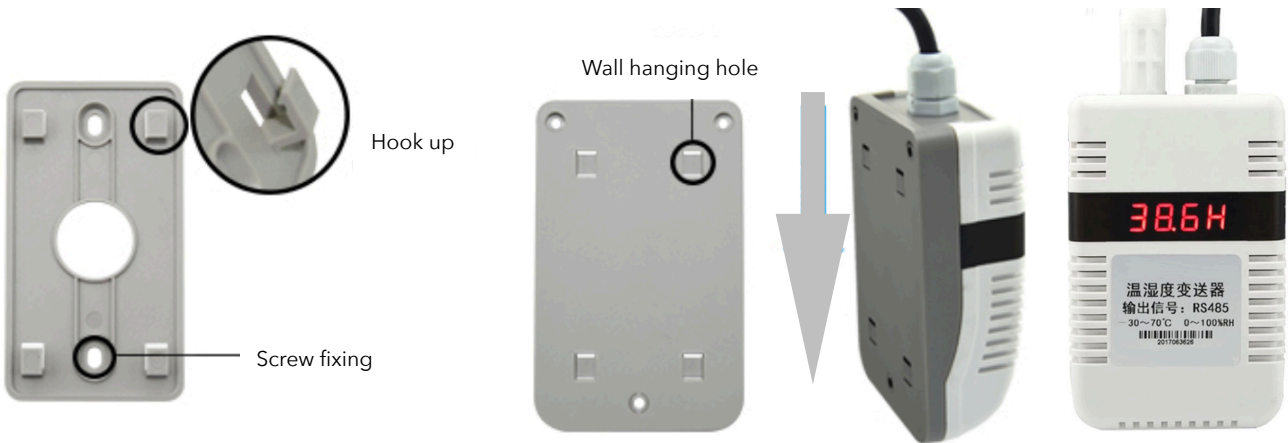
SPECIFICATION

Parameters	Range	Repeatability	Stability	Accuracy	Response time
Air temperature	-30°C~+70°C(Default)	±0.1°C	≤0.04°C/Year	±0.2°C(25°C)	<1S
Air humidity	0~100%RH	±0.1% RH	<0.5%RH/Year	±3%RH(10~90%)	<1S
PM2.5/PM10/PM1.0	0~1000ug/m3	≤1%F.S	≤2%F.S	±3% F.S (25°C)	<90S
CO ₂	0~5000ppm	≤1%F.S	≤2%F.S	±3% F.S (25°C)	<90S
O ₂	0~25%Vol	≤1%F.S	≤2%F.S	±2% F.S (25°C)	<15S
SO ₂	0~20ppm	≤1%F.S	≤2%F.S	±2% F.S (25°C)	<15S
H ₂ S	0~100ppm	≤1%F.S	≤2%F.S	±2% F.S (25°C)	<15S
NH ₃	0~50ppm	≤1%F.S	≤2%F.S	±2% F.S (25°C)	<15S
CH ₂ O	0~5000ppb	≤1%F.S	≤2%F.S	±2% F.S (25°C)	<60S
Noise	30 ~ 130dB	≤1%F.S	≤2%F.S	±2% F.S (25°C)	<15S
Power supply	DC 10-30V (default)				
Signal output	RS485, 0~2V, 0~2.5V, 0~10V, 4~20mA				
Test parameters	Temperature, humidity, PM, CO ₂ ,O ₂ , SO ₂ , H ₂ S, NH ₃ ,CH ₂ O, NOISE				
Work environment	Temperature - 30 °C - 50 °C; humidity 0 ~ 95% RH, non condensing				
Product material	ABS				
Installation method	Screw fixed				

DIMENSION



INSTALLTION



ORDER CODE

SEM224U	Air sensor		
	CODE	Parameters	
	A	Temperature	
	B	Humidity	
	C	PM2.5/PM10/PM1.0	
	D	CO2	
	E	O2	
	F	SO2	
	G	H2S	
	H	NH3	
	I	CH2O	
	N	Noise	
		CODE	Output
		1	RS485
		2	4~20mA
		3	0~10V
		4	RJ45 network port
SEM224U	ABC	1	Order example