

SEM329 Formaldehyde (CH₂O) concentration sensor

FEATURES

- High measurement accuracy and repeatability within $\pm 2\%$;
- Range 0~5ppm, other ranges can also be customized;
- The on-site power supply adopts 10~30V DC wide-voltage power supply, which can adapt to a variety of on-site DC power supplies;
- It adopts wall-mounted waterproof shell, which is easy to install and has a high degree of protection, which can be used in harsh on-site environments.



OVERVIEW

The formaldehyde transmitter designed by our company adopts electrochemical sensor which has the characteristics of high measurement accuracy, fast response speed, long service life, long stability and reliability. The output resolution of the equipment can reach 0.01ppm, and it can be monitored online for 24 hours for a long time. It is mainly used in Industries or equipment that require long-term online monitoring of formaldehyde concentration, such as smart homes, air cleaners, and air conditioners. 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, and the maximum communication distance is 2000 meters.

SPECIFICATION

*RS485 output

Power supply	10~30V DC	
Average power consumption	0.12W	
Output signal	485 output (standard Modbus protocol)	
Range	Temperature	-40°C~+80°C
	Humidity	0~100%RH
	Formaldehyde	0~5ppm
Accuracy	Temperature	$\pm 0.5^{\circ}\text{C}$ (25°C)
	Humidity	$\pm 3\%$ RH (60%RH,25°C)
	Formaldehyde	$\pm 5\%$ FS, no less than 5%Vol oxygen environment
Working temperature	-20~50°C	
Working humidity	0~95%RH non-condensing	
Working pressure	91~110Kpa	
Stability	$\leq 7\%$ signal value/year	
Repeatability	$\leq 2\%$	
Response time	$\leq 35\text{S}$	
Warm-up time	≥ 5 minutes	
Formaldehyde zero drift	$\leq \pm 0.5\text{ppm}$	
Service life	≥ 24 months	
Resolution	0.01ppm	

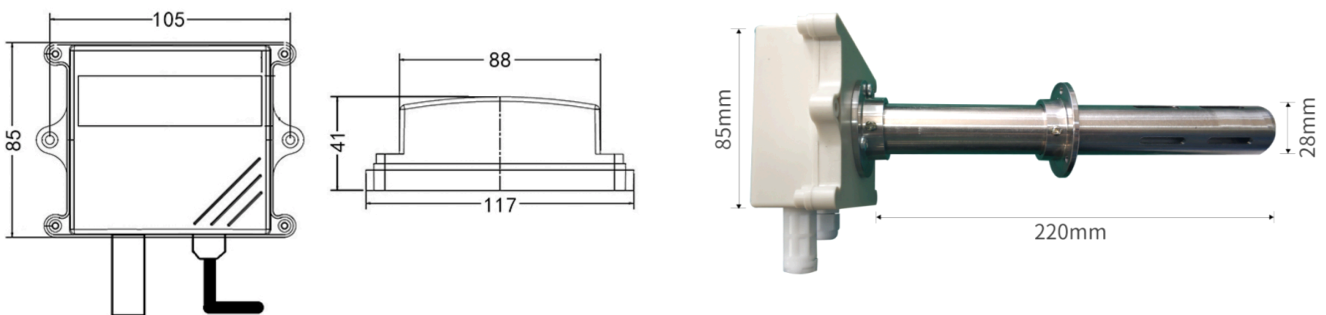
SPECIFICATION

*Analog output

Power supply	10~30V DC (0~10V output type only 24V power supply)
Average power consumption	0.12W
Output signal	4~20mA, 0~5V, 0~10V

Range	-40°C~+80°C,0~100%RH,0~5ppm
Accuracy	±0.5°C,±3%RH,±5%FS
Working temperature	-20~80°C
Working humidity	0~95%RH non-condensing
Working pressure	91~110Kpa
Stability	≤7% signal value/year
Repeatability	≤2%
Response time	≤35S
Warm-up time	≥5 minutes
Formaldehyde zero drift	≤±0.5ppm
Service life	≥24 months
Resolution	0.01ppm

DIMENSION



ORDER CODE

SEM329	Formaldehyde (CH ₂ O) concentration sensor		
	CODE	Parameters	
	A	Wall mounted type	
	B	Pipe line type	
		CODE	Output
		A	Modbus protocol 485 signal output
		B	4~20mA current output
	C	0~5V voltage output	
	D	0~10V voltage output	
SEM329	1	A	Order example