

Carbon Dioxide Transmitter

Aecl[®]

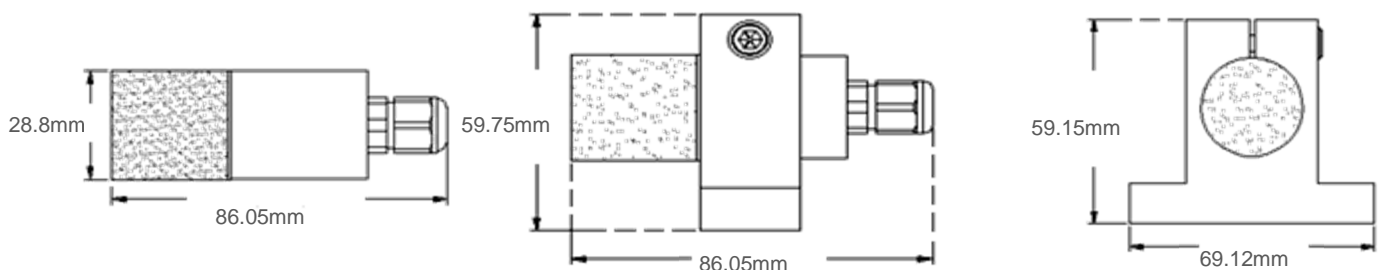
AVC-320 Series

■ Features

AVC-320 series CO₂ transmitter is specially designed for high humidity environment. It can be used for smart ventilation system or for environmental monitoring to control energy consumption and improve indoor air quality. NDIR infrared waveguide technology and air sampling sensing element ensures the high accuracy. It mostly used in cellar, greenhouse, storage room, brewery, plant factory, mushroom farms, etc., in order to monitor carbon dioxide level.



■ Dimensions



■ Specifications

Model	AVC-320SAX-M	AVC-320S4X-M
Sensing element	Gold-plated infrared (NDIR) wave-guide technology with Automatic Baseline Correction (ABC) and passive gas diffusion (no moving parts)	
Response time	< 10 sec. @ 30 cc/min. flow rate < 3 min. diffusion time	
Accuracy (at 25°C)	0~2000ppm ($\pm 30\text{ppm} \pm 3\%$ of reading), 2001~9999ppm ($\pm 70\text{ppm} \pm 3\%$ of reading) ⁽¹⁾⁽²⁾	
Repeatability	$\pm 20\text{ppm} + (\pm \text{reading} * 1\%)$	
Zero Drift	< $\pm 10\text{ppm/yr.}$ with Automatic Baseline Correction (ABC)	
Measurement range	0 ~ 9999 ppm	
Signal output	DC 4 ~ 20mA	RS485 (Modbus RTU)
Pressure dependence	1.6% reading per kPa	
Loading resistance	Current output: RL<500Ω at 24V DC	
Environmental	Temperature: -10 ~ +60°C; Humidity: 0 ~ 99%RH (without condensation)	
Storage temperature	-20 ~ +70°C	
Warm-up time	≤ 1 min. (at full specs ≤ 15 minutes)	
Power supply	20 ~ 36V DC	12 ~ 36V DC
Power consumption	1.7W (Max.)	1.4W (Max.)
Installation	Wall-mount	
Material	Main unit: Stainless steel; Fixed support: PE	
IP rating	IP54	

Note :

- (1) ABC correction will ensure the accuracy with continuous detection of three weeks. However, for some special application, maintenance and calibration would be necessary.
- (2) The accuracy is applied for indoor temperature 25°C and normal air pressure 101.3kPa. The specification is based on certified calibrated gas. The variation of mixture gas (as $\pm 1\%$) will be consider as its accuracy as absolute measurement.

■ Ordering information

AVC-320□□□-M

Code 1	Installation	Code 2	Output	Code 3	Display
S	Separated	A	4-20mA	X	No
		4	RS485		

*For details, please refer to specifications.