

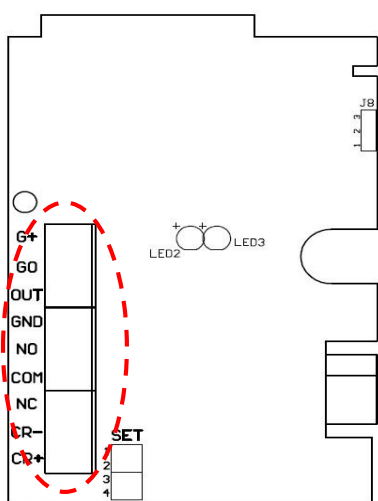
# AVC-310 CO2(Current / Voltage Output) Transmitter Instruction Manual

Thanks for choosing our product! Please read carefully and follow this instruction before using!

## Introductions

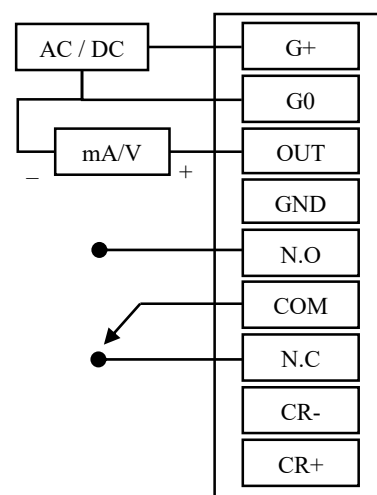
AVC-310 series is designed for measuring the ambient carbon dioxide concentration or with optional measurement of temperature & humidity. It can provide signal output for environmental monitoring or control. Utilizing NDIR sensing element ensures its accuracy of measurement. It is perfect for building climate control, greenhouse, mushroom farms and other processes where environmental control or monitoring is required. By controlling the ventilation or air-conditioning system based on actual demand, it helps to reduce energy consumption while maintaining a healthy indoor climate.

## Three-Wiring



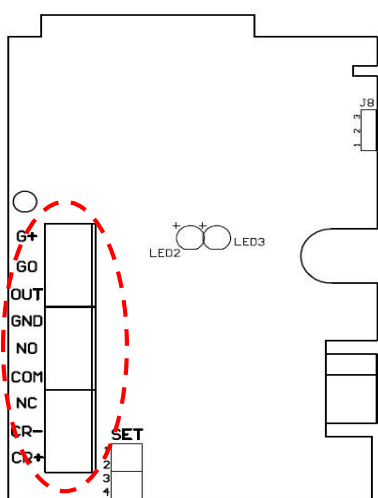
1.	G+	DC 12 ~ 36V AC 24V (50/60Hz)
2.	G0	System GND
3.	OUT	4~20mA / 2~10V
4.	GND	N/A
5.	N.O	Normally opened
6.	COM	Com
7.	N.C	Normally closed
8.	CR-	N/A
9.	CR+	N/A

### Connection



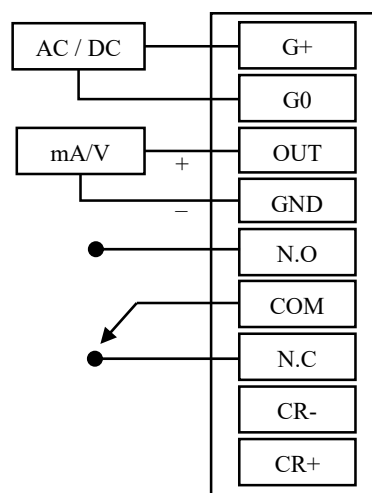
【Figure 1】

## Four-Wiring



1.	G+	DC 12 ~ 36V AC 24V (50/60Hz)
2.	G0	System GND
3.	OUT	4~20mA / 2~10V
4.	GND	Signal GND
5.	N.O	Normally opened
6.	COM	Com
7.	N.C	Normally closed
8.	CR-	N/A
9.	CR+	N/A

### Connection



【Figure 2】

### Relay output (CO2 set point alarm)

Set CO2 alarm relay output with SET2.

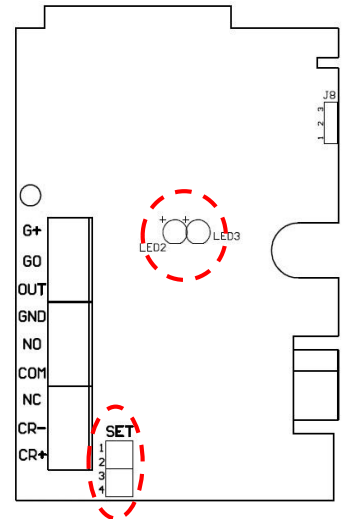
Relay Contact setting :

Relay Output (Hysteresis is 100ppm)	SET 2
800 ppm	
1000 ppm (Default)	

\* When the CO2 concentration reaches the alarm setting point, LED indicator will be switched on.

\* The standard type is for general indoor use. For any special application, such as industrial or agriculture, please contact us.

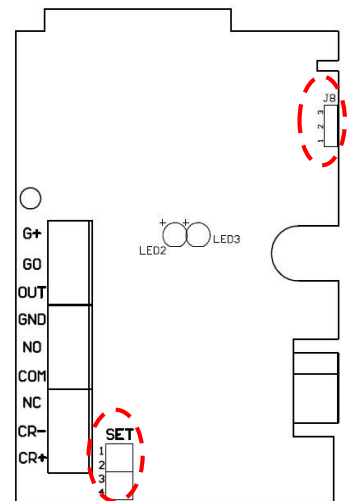
\* Please do not use the AVC-310 series in high humidity environment.



### Select Output mode (mA / V)

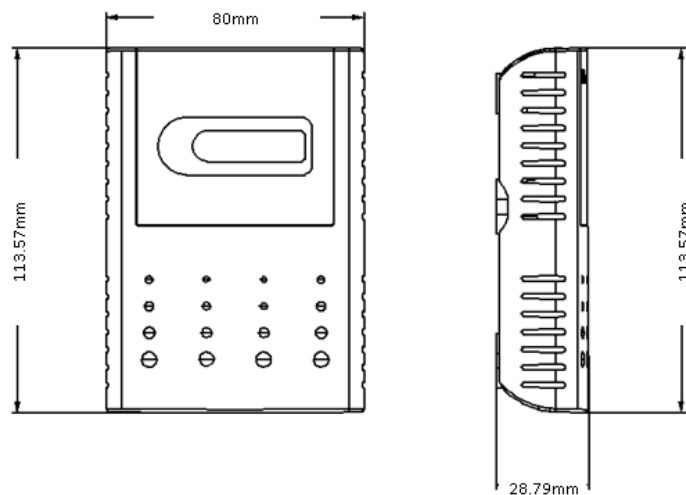
SET1 and J8 are used to select 0~20 mA / 4~20mA / 2~10V / 0~10V outputs mode.

Output	SET 1	J8
0~20mA		
4~20mA (Default)		
2~10V		
0~10V		

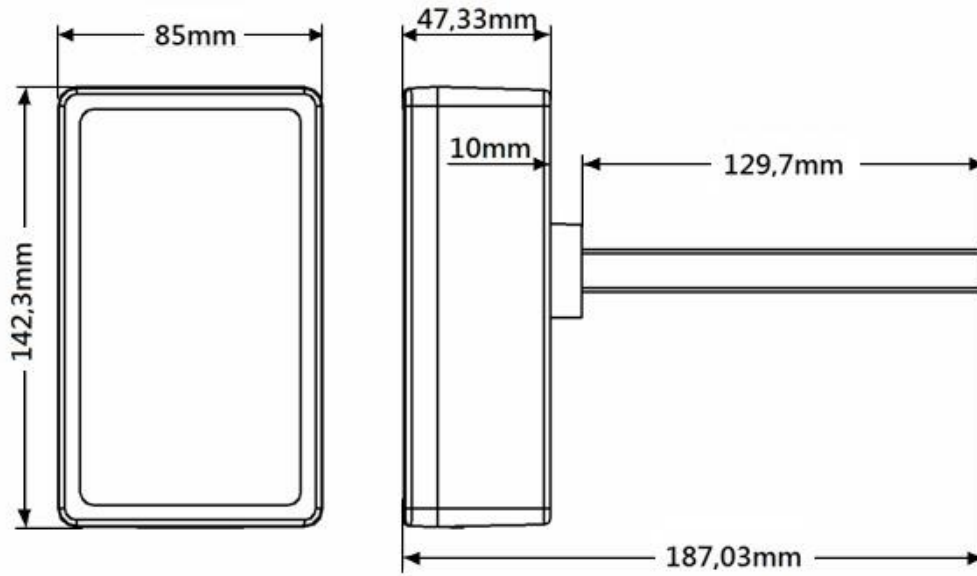


### Dimensions

Wall mount Type



## Duct mount Type



## Installation

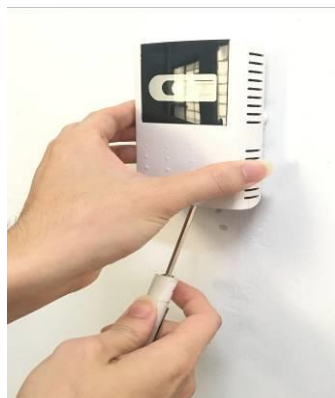
1. Please check if the transmitter, accessory pack and instruction manual are included in the package.
2. Please decide right position for installation.

### Wall mount type

- Press tenon on bottom of the housing with a screw driver to remove the upper cover.  
(Please refer to the Figure 3 to Figure 5)



【Figure 3】



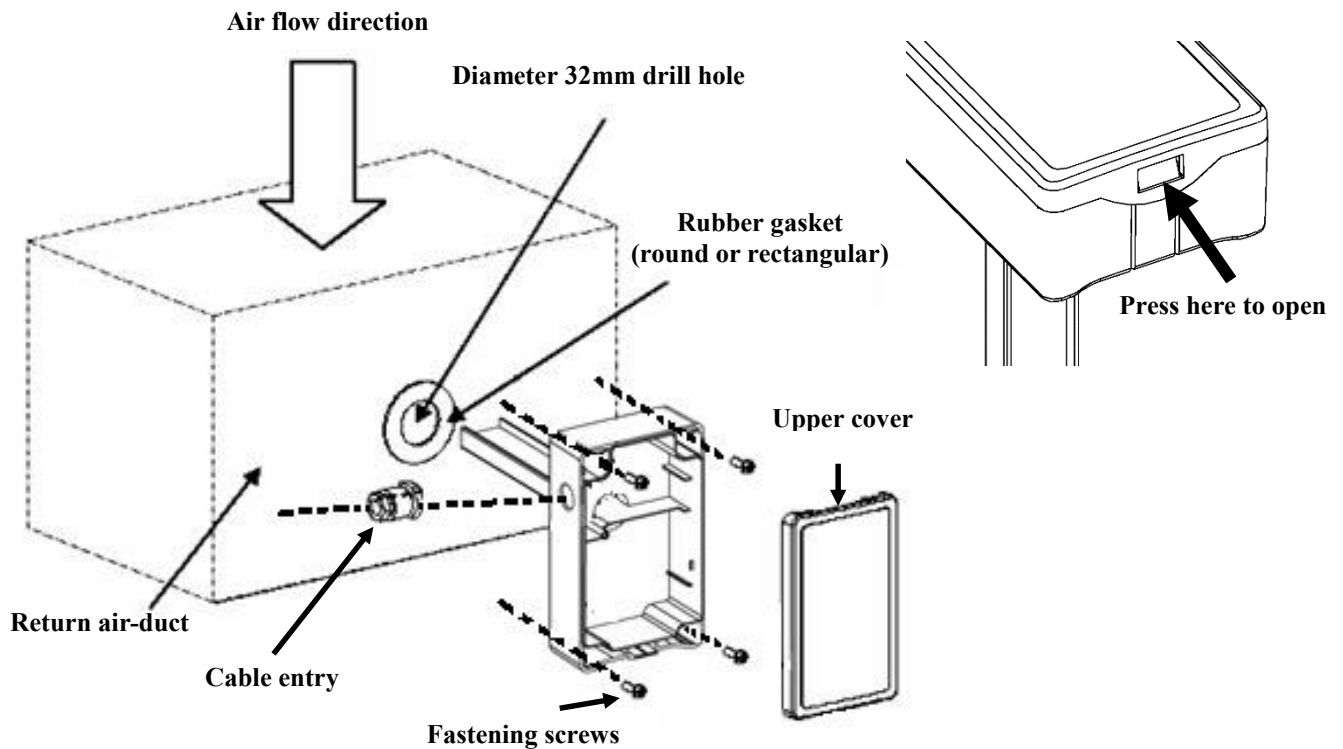
【Figure 4】



【Figure 5】

### Duct mount type

- Press tenon on the bottom of the housing with a screw driver to remove the upper cover.  
(Please refer to the Figure 6)



**【Figure 6】**

### Notice for installation

1. Please install the transmitter around 1~2m above floor level for better detection.
2. Please avoid the location near fans, exhaust fan, air conditioner vent or elevator entrance.
3. Please avoid the waterish area or direct sunlight.
4. Do not install the transmitter on an unstable or shaking surface.
5. Do not install the transmitter in areas with rapid temperature changes or with extreme ambient conditions.
6. Please avoid heat source or the device exhausting gas.

### Trouble shooting

Problem	Possible cause	Recommended solution
No response after wiring power supply.	Insufficient power supply. The power wiring is disconnected.	Please make sure the power supply should be more than 1.6W. Check power wiring.
The reading is lower than actual level.	Sensing element is aging. Zero point drift.	Please contact the manufacturer
RS485 connection fails.	Incorrect device ID setting or incorrect connection settings. RS485 wiring is disconnected.	Please verify the device ID and connection settings. Check RS485 wiring. Reset to default settings.
High loss rate of packet for RS485	Signal interference. RS485 wiring is disconnected.	It is recommended to use 2 pair twisted shielded cable. Check RS485 wiring.