

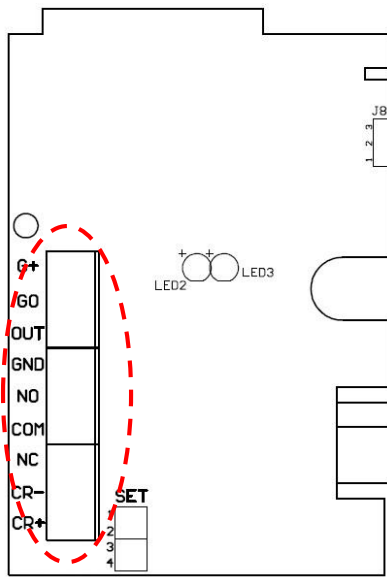
# CO2 Transmitter (4~20mA output) Instruction Manual

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

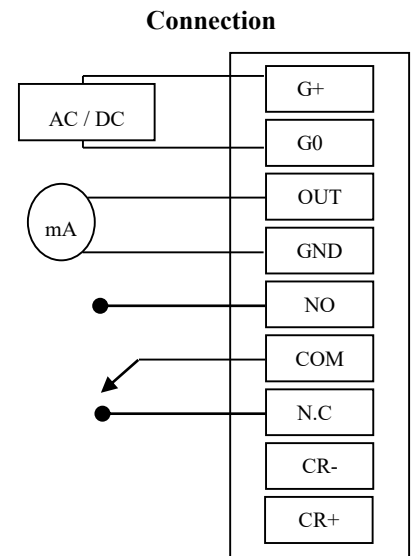
## Introductions

AVC-310 series is designed for measuring the ambient carbon dioxide concentration. It can provide signal output for environmental monitoring or control. Utilizing NDIR sensing element ensures its accuracy of measurement. Two different types for standard (0~2000ppm) and higher level (0~9999ppm) measurement range. The standard type is for building climate control, greenhouse, library, offices, shopping mall; and the high level type can be used in chemical gas factory, wine cellar, brewery and etc. °

## Wiring for current output model



1.	G+	DC 12 ~ 36V AC 24V (50/60Hz)
2.	GO	System GND
3.	OUT	4~20mA
4.	GND	Signal GND
5.	NO	Normally opened
6.	COM	Com
7.	NC	Normally closed
8.	CR-	N/A
9.	CR+	N/A



【Figure 1】

**Notice: Please remove power from the unit before wiring, in order to avoid any damage or hazard.**

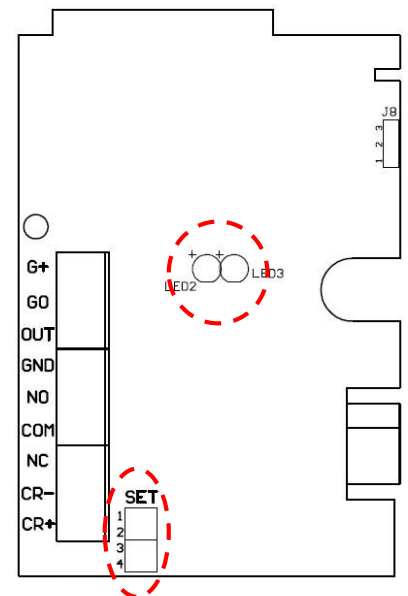
## Relay output (CO2 set point alarm)

Set CO2 alarm relay output with SET2.

### Relay contact setting:

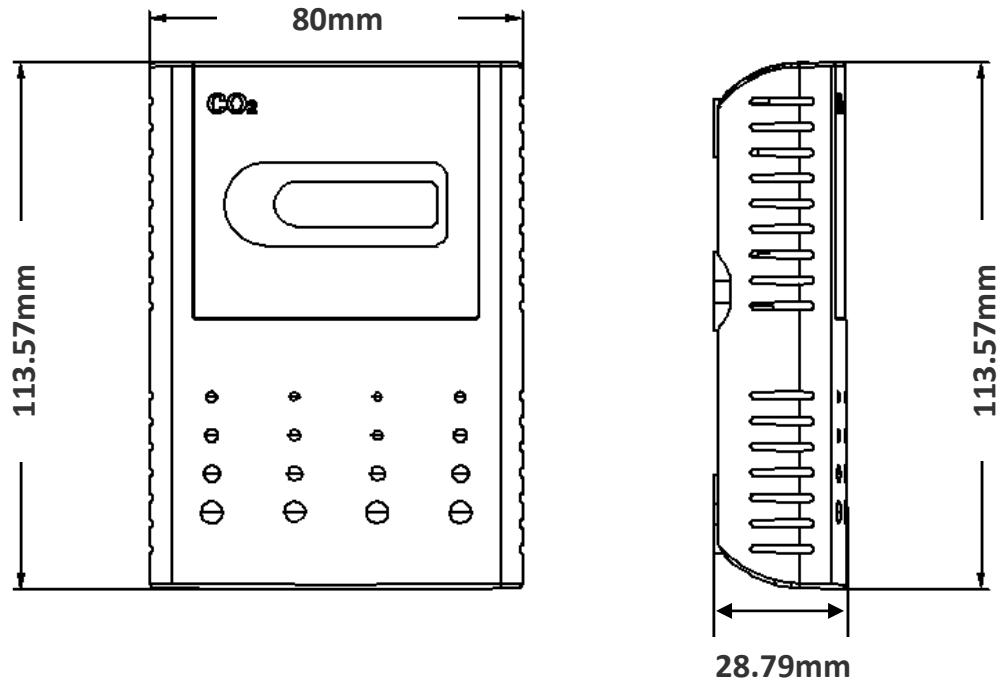
Relay Output (hysteresis is 100ppm)		SET 2 setting
Standard Type	High Level Type	
800 ppm	8000 ppm	
1000 ppm (Default)	9999 ppm (Default)	

- 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.

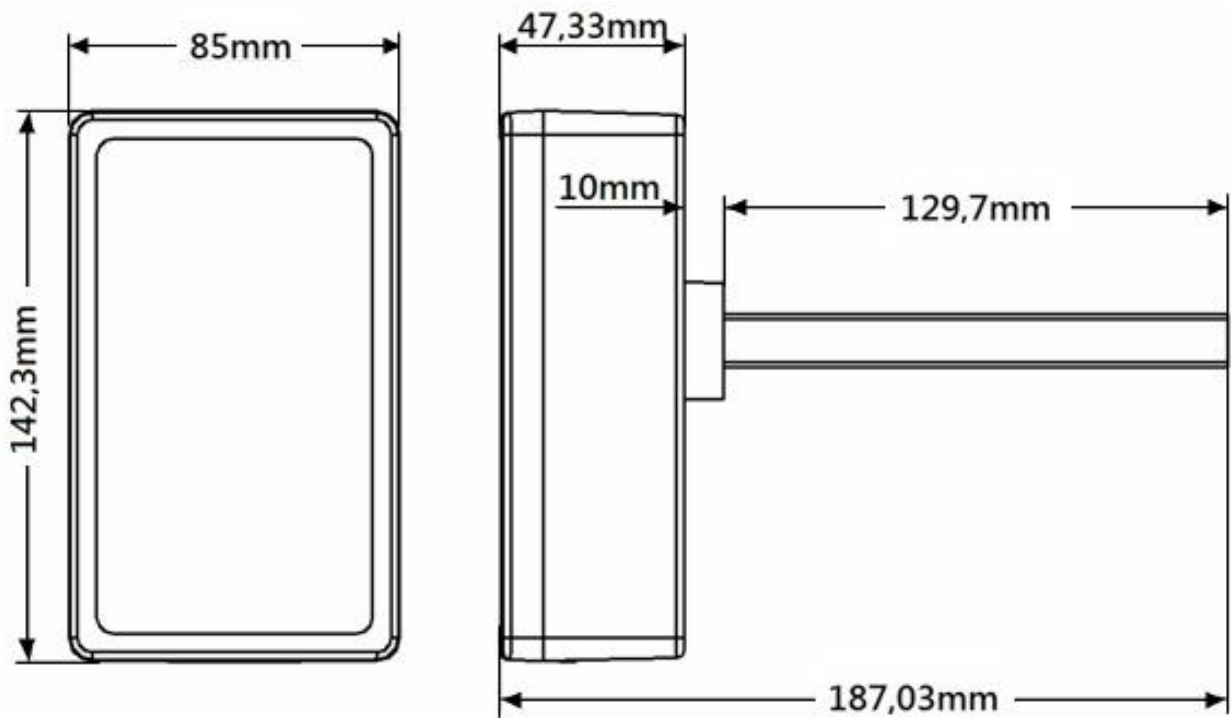


**Dimensions**

**Wall mount Type**



**Duct mount Type**



## Installation

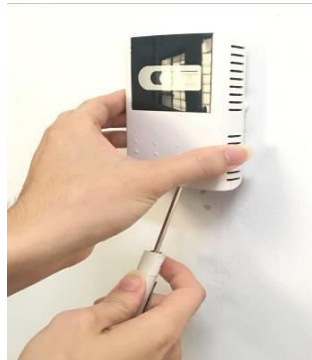
- 1 Please check if the transmitter, accessory pack and instruction manual are included in the package.
- 2 Please decide right position for installation.

### Wall mount type

- Press tenon on bottom of the housing with a screw driver to remove the upper cover. (Please refer to the Figure 2 to Figure 4)



【Figure 2】



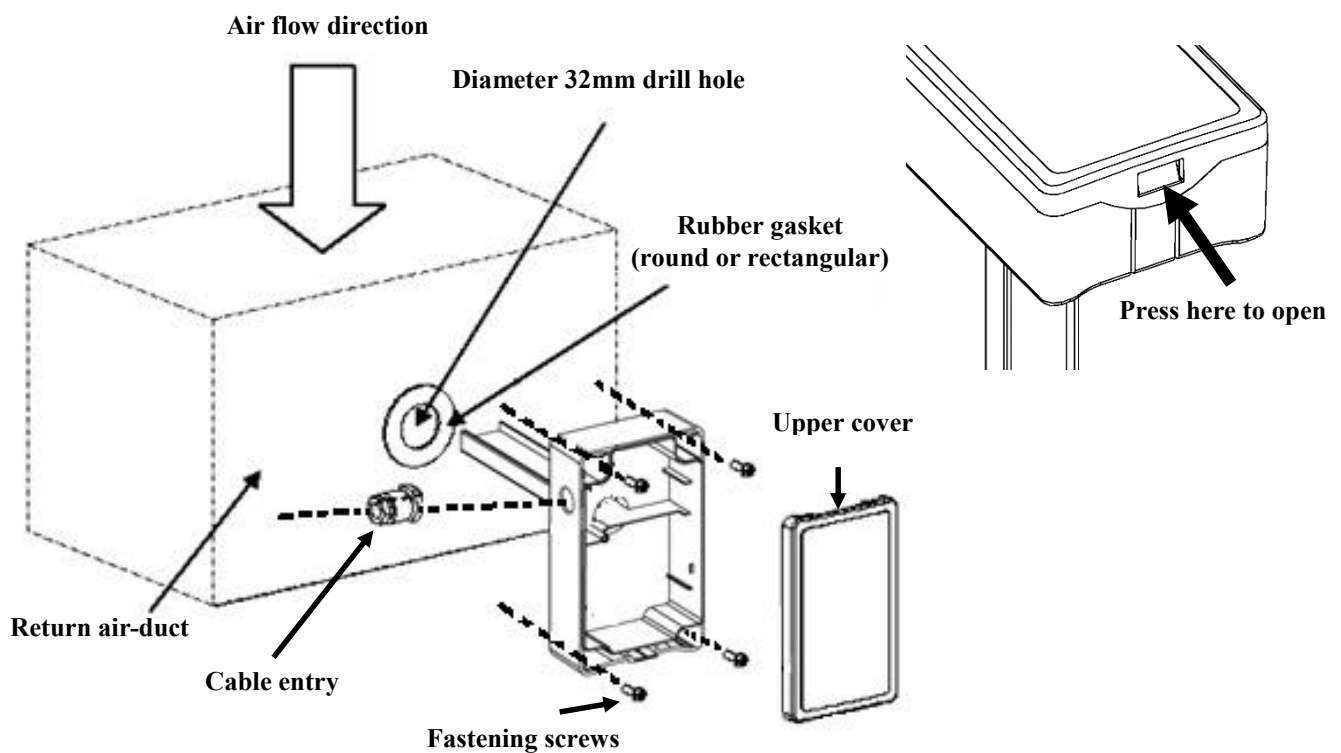
【Figure 3】



【Figure 4】

### 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 5)



【Figure 5】

**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**

<b>Problem</b>	<b>Possible cause</b>	<b>Recommended solution</b>
No response after wiring power supply.	<ol style="list-style-type: none"> <li>1. Insufficient power supply.</li> <li>2. The power wiring is disconnected.</li> </ol>	<ol style="list-style-type: none"> <li>1. Please make sure the power supply should be more than 1.6W.</li> <li>2. Check power wiring.</li> </ol>
The reading is lower than actual level.	<ol style="list-style-type: none"> <li>1. Sensing element is aging.</li> <li>2. Zero point drift.</li> </ol>	Please contact the manufacturer
RS485 connection fails.	<ol style="list-style-type: none"> <li>1. Incorrect device ID setting or incorrect connection settings.</li> <li>2. RS485 wiring is disconnected.</li> </ol>	<ol style="list-style-type: none"> <li>1. Please verify the device ID and connection settings.</li> <li>2. Check RS485 wiring.</li> <li>3. Reset to default settings.</li> </ol>
High loss rate of packet for RS485	<ol style="list-style-type: none"> <li>1. Signal interference.</li> <li>2. RS485 wiring is disconnected.</li> </ol>	<ol style="list-style-type: none"> <li>1. It is recommended to use 2 pair twisted shielded cable.</li> <li>2. Check RS485 wiring.</li> </ol>