

GD250 series CO Detector

PRODUCT DATA



Application

GD250 series Transmitters are designed for use with building automation, energy management, and computer monitoring systems. These sensors can be used for parking lot, tunnel and under ground places.

Features

- 4~20 mA, / 2~10 VDC Mod-bus output
- Option for Electrochemical sensor
- 3-number LCD display optional
- Various mounted types selectable
- CO range is selectable in one model
- High reliability & accuracy
- Sensor failure self-detection
- Wide sensing range
- Rapid response

Specifications

CO Sensor : Electrochemical

Measurement : 0~ 250ppm

Signal Output: 4~20mA , 2~10VDC
Modbus RTU

Accuracy: ±5% FS @25C. 50% RH for
0~100 ppm
± 10% FS @25C. 50%RH for
100~ 250 ppm

Relay contact setting: 50 ppm /100 ppm /150 ppm

Relay output: isolated N.O. & N.C.,
2A,30V up to 0.5A, 125V dc/ac.

Power Supply: 24 VAC/VDC (12~36V)

Current Output Load: 500 Ohm Max

Working temperature:

Room type: -10°C ~ +50°C

5% ~ 95% RH without condensation

Certification: 

Housing Material: Plastic (ABS)
Flame retarded acc. to UL94-V1

Protection Standard

Room type IP30

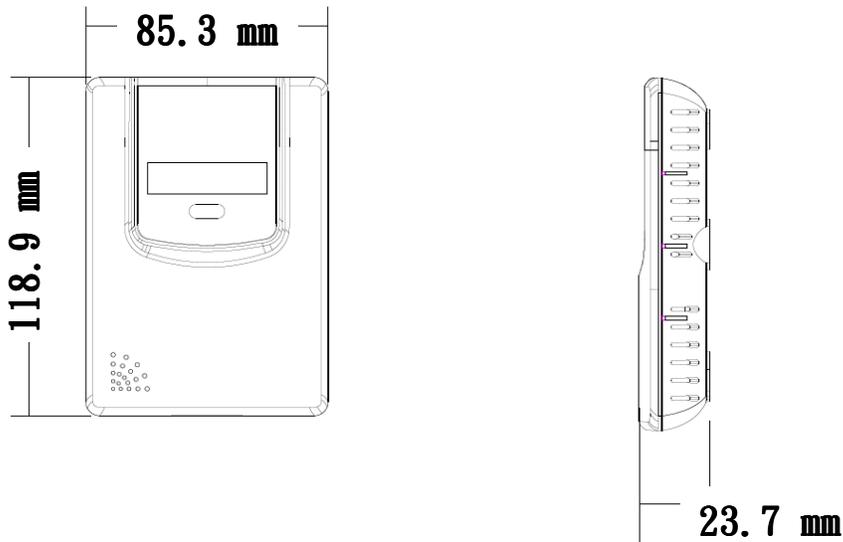
Calibration: Factory calibrated

Model Selection

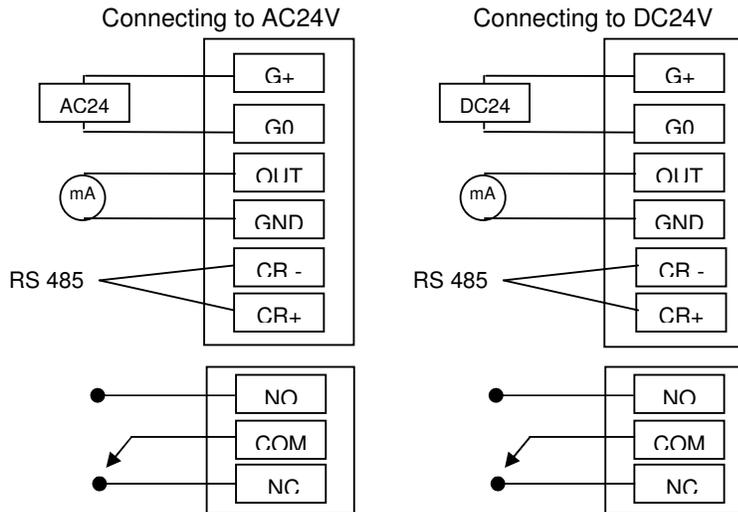
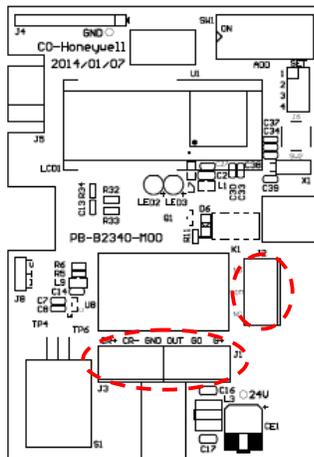
GD250W3E	CO Detector, 50/100/150ppm select by jumper, Relay output
GD250W4E	CO Detector, 0~250ppm, 4~20mA / 2~10VDC output
GD250W4N	CO Detector, 0~250ppm, LCD, 4~20mA / 2~10VDC , Modbus, Relay output

Appearance and Dimension (Dimension in mm)

Space mount Transmitter

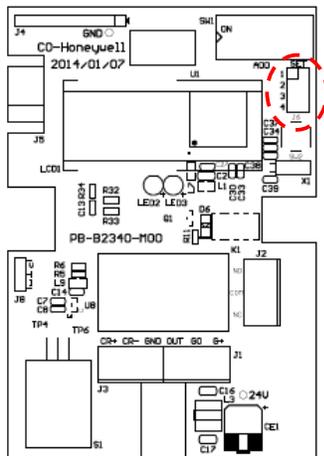


Wiring



1.	G+	AC/DC 12~36V
2.	G0	System GND
3.	OUT	4~20mA / 2~10V
4.	GND	Signal GND
5.	NO	Normally opened
6.	COM	Com
7.	NC	Normally closed
8.	CR -	RS485 CR (-)
9.	CR +	RS485 CR (+)

Relay contact setting

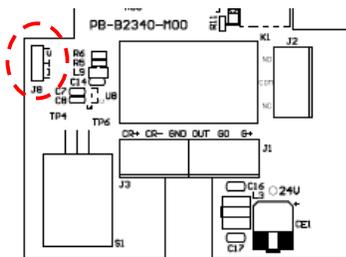


Jumper setting

- Relay contact setting :
 - set 1: pre-set at 50 ppm with hysteresis of 10ppm.
 - set 2: pre-set at 1,00 ppm with hysteresis of 10ppm.
 - set 3: pre-set at 1,50 ppm with hysteresis of 10ppm

Relay Output	Set 1	Set 2
Relay contact setting 50 ppm	1	1
Relay contact setting 100 ppm	1	0
Relay contact setting 150 ppm	0	1
Arbitrary density setting mode	0	0

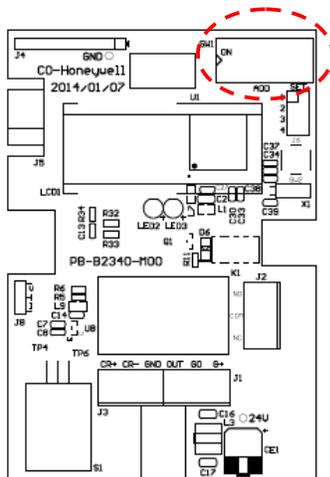
Outputs mode



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

Output Configurations	JP8
4~20 mA	
2~10 V	

Device ID Selection



Device ID (ON =1 , OFF = 0)					
1	1000 0000		165	1010 0101	
2	0100 0000		195	1100 0011	
	.			.	
	.			.	
	.			.	
55	1110 1100		197	1010 0011	
100	0010 0110		200	00010011	
	.			.	
	.			.	
125	1011 1110		254	0111 1111	
127	1111 1110		255	1111 1111	

Protocol

Baud Rate = 9600 · Word Length = 8 · Parity = none · Stop Bits = 1 ·

Data Reading Type

	Device ID	Function	Address	Data Length	Error Check
CO ppm	01	03	0001	0001	XXXX

Responding Data Type

	Device ID	Function	Data byte	CO2 ppm	Error Check
CO ppm	01	06	02	0064	XXXX

**** Remark 1 :**

XXXX is the CRC16 checksum (**Check Sum**) ·

**** Remark 2 :**

CO2 resulting data in hex.

The resulting data is 0x0064 into decimal, ie 100 ppm.

TO open the wall mounted housing

Figure 1..Closed housing seen from above
The housing is opened by pressing a screw driver into the lock opening slot.



Figure 2.. By pressing a flat screw-driver
Into the opening slot,the two locking hook
would be released.



**INSTALLATION GUIDE FOR
DUCT MOUNT SENSOR OR TRANSMITTER :**

- Drilling a mounting hole with diameter 13mm on the duct near measuring point. Insert the probe pipe into duct.
- Unscrew & open the front cover of the product.
- Use enclosed screws to install the wiring box on the duct.
- Lead wire from DDC or PLC panel through opening by using a properly sized screw driver to connect each wire to the terminals of the transducer module according to field wiring diagram.
- Put front cover back and tighten front cover by screw.
- Use a properly sized screw driver to connect the lead wires to the terminals.

**INSTALLATION GUIDE FOR
WALL MOUNT SENSOR OR TRANSMITTER :**

- Remove the front cover and place the back panel to the desired location.
- Attaching the enclosed screws to the back panel.
- Place the front cover to the back panel.
- Keep the sensor or transmitter away direct sun light, heat source and cold source.
- The recommended location of wall mount sensor or transmitter is 1.5M above the ground.