

# Carbon Dioxide (CO<sub>2</sub>) Transmitter And Controller Operation Manual

## CD-200 / CD-200L

DATA SHEET



**CD-200**  
(without LCD Display)



**CD-200L**  
(with LCD Display)

### General

CD-200 series are Transmitter type models of CO<sub>2</sub> Sensor, which give current output or voltage output (Jumper selectable).

They are 4 + 2 wired (2 Power lines, 2 signal lines and 2 relay lines) .

### Features

- Models available with SPST (Single Pole Single Throw, normally open) relay output
- Output mode : Voltage output/Current output
- Models available with LCD for sensor readings and status information (CD-200).
- Non-Dispersive Infrared (NDIR) technology used to measure CO<sub>2</sub> levels.
- Re-calibration function (of S-110H module)
  - . 7 days period Auto-Calibration software could be installed in Sensor on Sale.
  - . 10min. Manual Recalibration is executable with TRB-100 tool.
- Size : 123mmx69mmx40mm

## Specifications

### General Performance

#### Operating Temperature range

-10 ~ 60°C

#### Operating Humidity range

0 ~ 95% RH (Non-condensing)

'G' Option 0 ~ 99%RH (non-condensing)

#### Storage Temperature

-30°C ~ 70°C

### CO<sub>2</sub> Measurement

#### Sensing Method

NDIR (Non-dispersive Infrared)

#### Measurement Range

0 ~ 2,000ppm

(5,000/10,000ppm is settable with jumper)

#### Accuracy

±30ppm ±5%

(ACDL operation : ±30ppm ±3% of reading)

#### Response Time (90%)

150 seconds

#### Sampling Interval

3 sec.

### Electrical Data

#### Input Power

24VAC ± 20%, 50~60Hz

or 24VDC (12~36VDC)

(2 Power lines)

### Output Connector

4 ~ 20mA is default

(2 ~ 10V<sub>DC</sub>, 0 ~ 10V<sub>DC</sub>)

or 0 ~ 20mA is settable by user any time)

### Relay Output(available for CD-200)

#### Contract Rating

1A/120VAC

#### Configuration

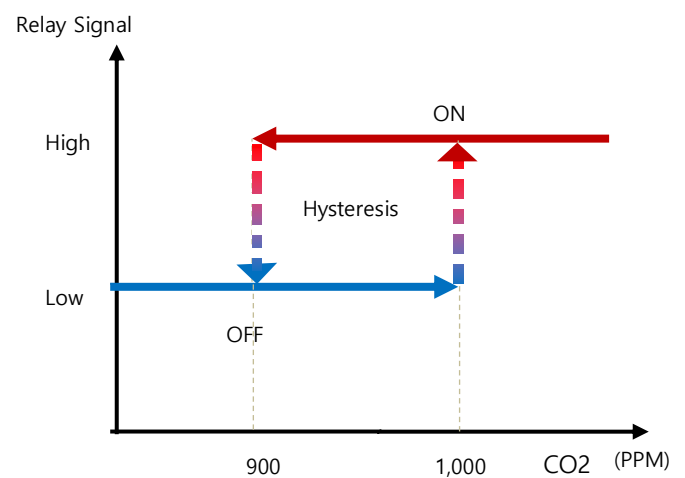
SPST, Normally Open relay

#### Relay Activated

On ≥ 1,000ppm,

#### Relay Deactivated

Off ≤900ppm



Relay on signal is designed to be activated when CO<sub>2</sub> measured value surpass 1,000ppm and deactivated down to 900 ppm to avoid unwanted rapid switching by hysteresis effect.

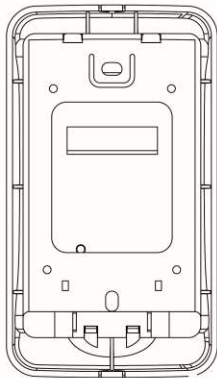
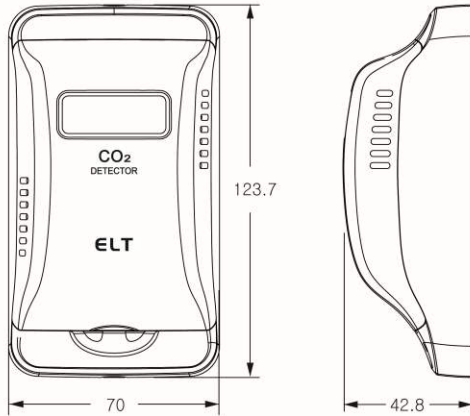
Relay activation and deactivation point could be changed on sale as option.

Option 1.

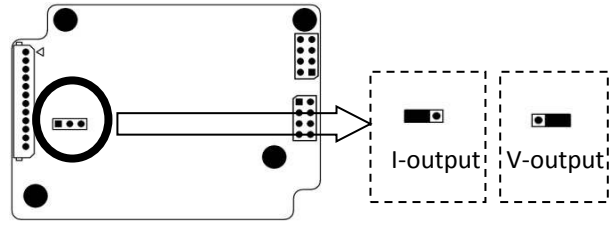
#### Relay Activated & Deactivated

On ≥ 900ppm, Off ≤800ppm

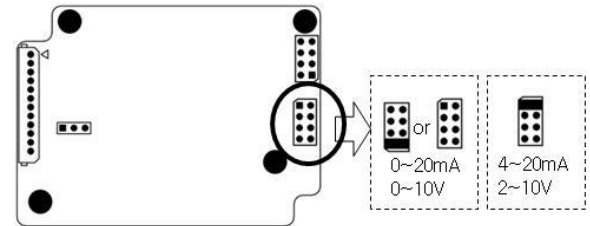
**Dimensions (unit : mm)**



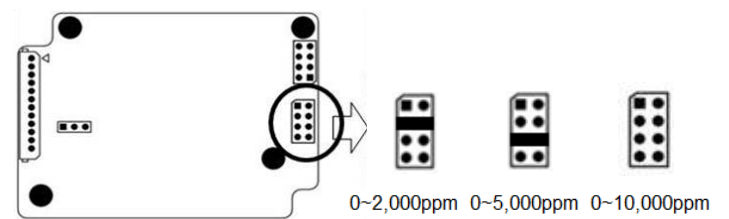
**JP1 Output Selection**



**JP2 Output Selection**

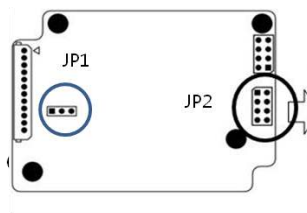


**JP2 ppm range Selection**



**Example JP1, JP2 Selection**

(For current output, 0~5,000ppm range, 4~20mA output selection)



**Wiring Method**

