

Carbon Dioxide (CO₂) 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 CO₂ 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 CO₂ 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

CO₂ 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_{DC}, 0 ~ 10V_{DC}

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

Relay Output(available for CD-200)

Contract Rating

1A/120VAC

Configuration

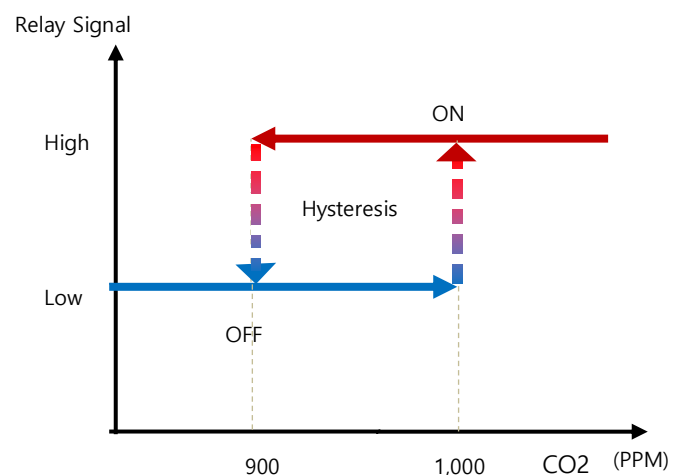
SPST, Normally Open relay

Relay Activated

On ≥ 1,000ppm,

Relay Deactivated

Off ≤900ppm



Relay on signal is designed to be activated when CO₂ measured value surpass 1,000ppm and deactivated down to 900 ppm to avoid unwanted rapid switching by hysteresis effect.

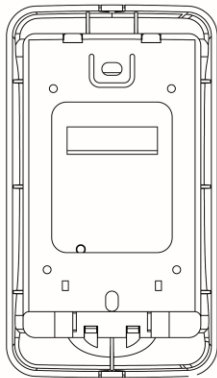
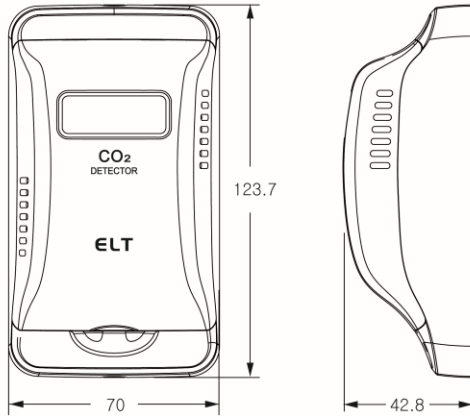
Relay activation and deactivation point could be changed on sale as option.

Option 1.

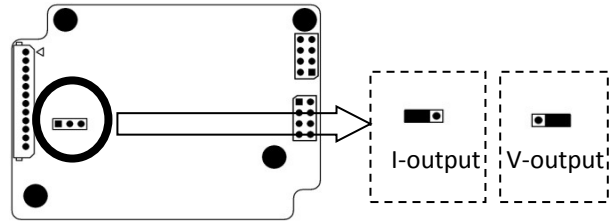
Relay Activated & Deactivated

On ≥ 900ppm, Off ≤800ppm

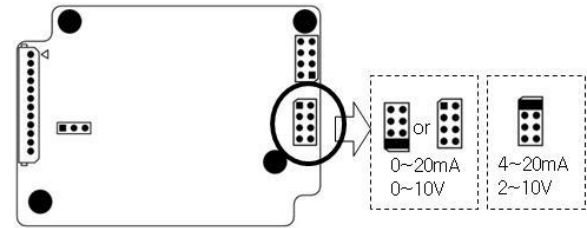
Dimensions (unit : mm)



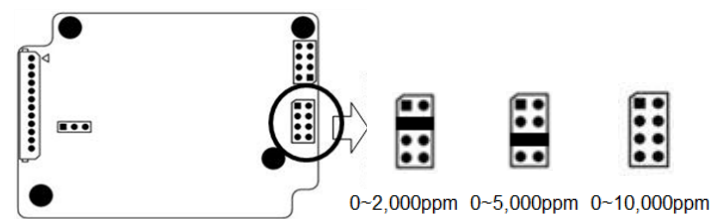
JP1 Output Selection



JP2 Output Selection

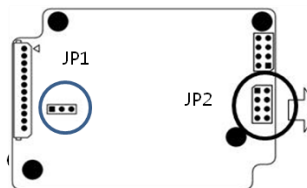


JP2 ppm range Selection



Example JP1, JP2 Selection

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



Wiring Method

