

Carbon Dioxide (CO₂) Transmitter And Controller Operation Manual

CD-200 / CD-200NL

DATA SHEET



CD-200NL
(without LCD
Display)



CD-200
(with LCD
Display)

General

CD-200 and CD-200NL are Transmitter type models of CO₂ Sensor, which are for 0-20mA, 4-20mA Current output module or 0-10V, 2-10V Voltage output module (Jumper select). 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-100H 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

0 ~ 50°C

Operating Humidity range

0 ~ 95% RH (Non-condensing)

Storage Temperature

-20°C ~60°C

CO₂ Measurement

Sensing Method

NDIR (Non-dispersive Infrared)

Measurement Range

0 to 5,000 / 10,000ppm (Selectable by jumper),
0 to 2,000 (Optional)

Accuracy

±30ppm ±5%

Response Time(90%)

150 seconds

Sampling Interval

3 sec.

Electrical Data

Input Power

24VAC, 24VDC± 20%, 50/60Hz
(2 Power lines)

OutputConnector

4 ~ 20mA and 2 ~ 10VDC (Default)
0 ~ 10VDCand 0 ~ 20mA

(Jumper selectable

-Voltage output or current output)

Relay Output(available for CD-200)

Contract Rating

1A/120VAC or 1A/24VDC

Configuration

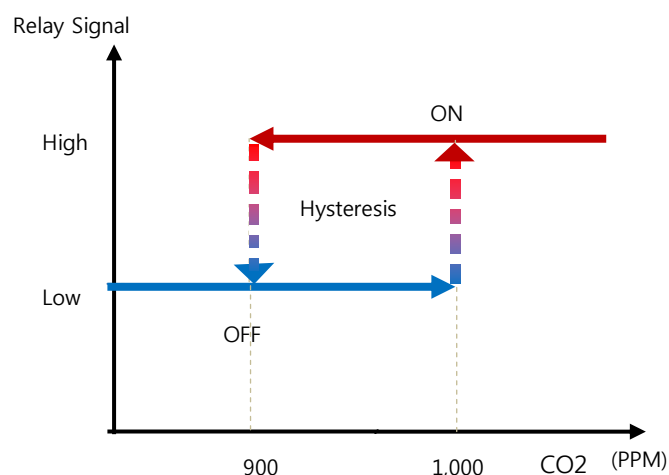
SPST, Normally Open relay

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.

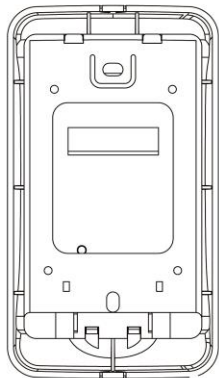
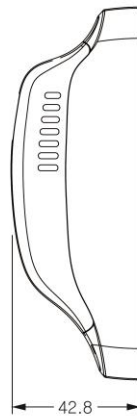
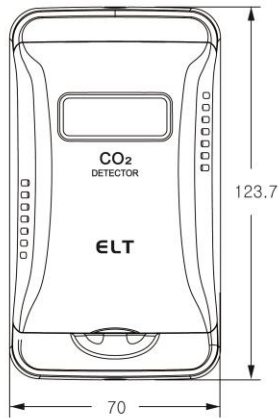
Relay activation and deactivation point could be changed on sale as option.

Option 1.

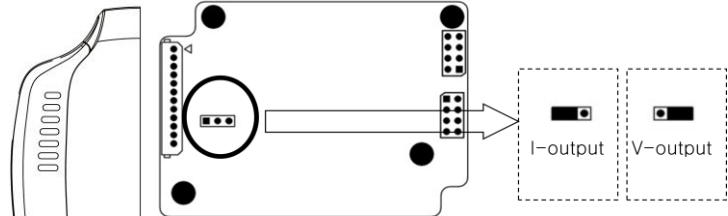
Relay Activated & Deactivated

On ≥ 900ppm, Off ≤800ppm

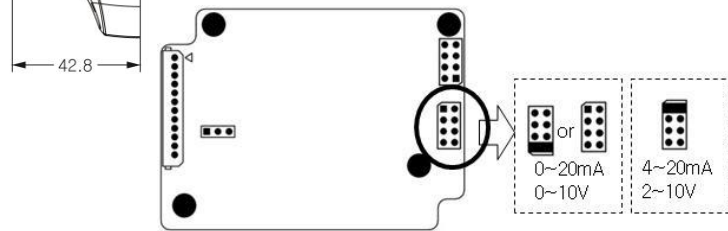
Dimensions (unit : mm)



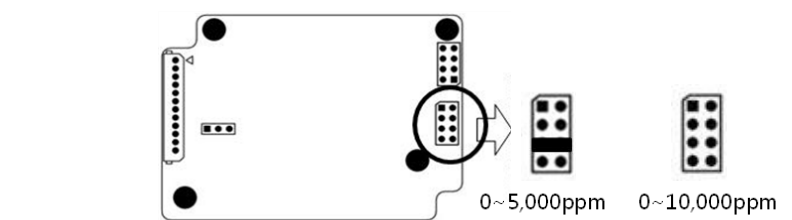
JP1 Output Selection



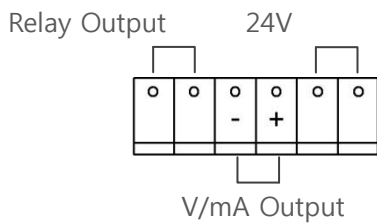
JP2 Output Selection



JP2 ppm range Selection



Wiring Method



Example JP1, JP2 Selection

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

