

CO₂ DETECTOR/INDICATOR

P/NF2000IAQ-CO₂-3100/3101/5100/5101

CE Approval 

F2000IAQ-CO₂ detector/Indicator is used to monitor and alarm CO₂ level and room temperature. Relative humidity detection and display can be as an option. Other options can be provided to users: RS485 communication interface with independent address; one dry contact output to control a ventilation device.

Especial design for schools, kindergartens, office buildings, conference rooms, rest rooms as well as other public places

- ◆ **Built-in NDIR CO₂ module, 15 years long life.**
- ◆ **ABC_Logic self calibration algorithm for CO₂ sensor.**
- ◆ **Real-time detect and display room CO₂ and temperature**
- ◆ **3 LED indicator lights following three different CO₂ ranges to indicate ambiance ventilation situation: Optimal Ventilation; Poor Ventilation and Insufficient Ventilation.**
- ◆ **Optional humidity detection and display**

□ Features

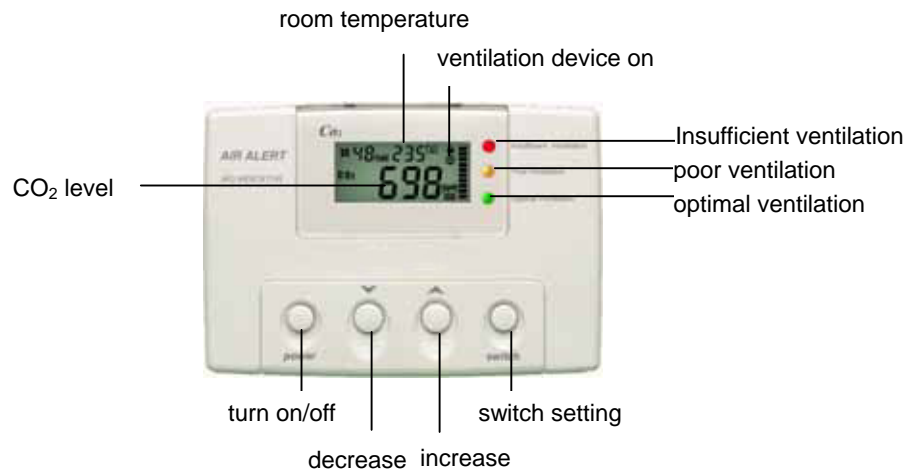
- ◆ Real-time detecting and display CO₂ level during 0ppm to 20,000ppm CO₂ range; Also detecting room temperature from 5 to 45
- ◆ Optional real-time humidity from 5%RH to 95%RH
- ◆ NDIR CO₂ sensor technology of infrared self diffusion, 15 years lifetime
- ◆ Self Calibration Algorithm makes it in using without calibration amending
- ◆ The three measured CO₂ ranges for 3-LED indicator lights selectable by end users
- ◆ LED's brightness adjustment
- ◆ Optional 1X dry contact output to control a ventilation device
- ◆ Easy preset CO₂ level for buzzer alert (optional)
- ◆ Optional RS485 interface to connect to a PC or another system (optional)

□ Specifications

| | |
|--|--|
| Gas detected | Carbon Dioxide (CO ₂) |
| Sensing element | Non-Depressive Infrared Detector (NDIR) |
| Temperature sensor | NTC |
| Temperature correction | Self compensation |
| CO ₂ NDIR life | 15 years |
| Consumption | 3.5W/ Max, 2.5W/ Average |
| Accuracy@25 (77 °) | ±40ppm + 3% of reading |
| Stability | <2% of FS over life of sensor (15 yr typical) |
| Calibration interval | ABC Logic Self Calibration Algorithm |
| CO ₂ measuring range | 0 ~ 2000ppm, which is default value 0 ~ (1,000~20,000)ppm, programmable selection |
| CO ₂ setting & Display resolution | 1ppm |
| Temperature measuring range | 0 ~ 50 (32 ~ 122 °) |

| | |
|---------------------------------------|--|
| Temperature setting range | 5 ~ 45 (41 ~ 113) |
| Option: 1X dry contact output | Rated currency for contact point: 3A 220VAC/30VDC, resistance load |
| Option: RS485 communication interface | 9600/14400/19200(default)/28800/38400bps rates selectable by program,15KV protection for static, independent address setting |
| Operation condition | 0 ~ 50 (32 ~ 122), 0 ~ 95%RH without condensing |
| Power supply | 220VAC/110VAC or 24VAC 50/60HZ±10% |
| Weight | 380g |
| Dimensions | 130mm×90mm×40mm |
| Connections Interface | Locate in interface of connection |
| Installment standard | 65mm×65mm or 2"×4" wire box |
| Wiring standard | Wire section area<1.5mm ² |
| Approval Standard | CE-Approval |
| Programming and selection | DIP switches inside and external push-buttons |

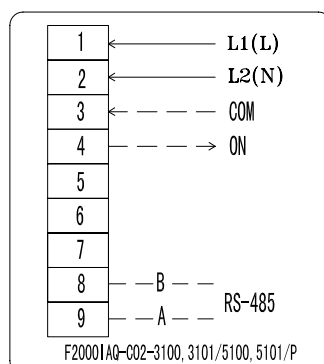
□ Buttons and LCD



□ Shipping Information

| | |
|-----------------|-------------------------|
| India. Ctn. Dim | 135mm×95mm×55mm |
| Master Ctn. Qty | 40 |
| Master Ctn. Dim | 44cm(L)×32cm(W)×32cm(H) |
| Master Ctn. Wt. | 15 KG |

□ Wiring Diagram



□ Model Guide

| | |
|-----------------|----------------|
| Gas Type | |
| CO ₂ | Carbon Dioxide |

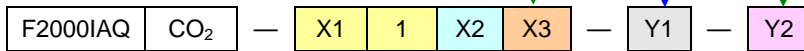
| Code | | Model |
|------|---|---|
| 3 | 1 | Standard model (CO ₂ & temperature detection) |
| 5 | 1 | CO ₂ & temperature detection with RS-485 network communication |

| Code | Analog output |
|------|------------------|
| 0 | No analog output |
| 1 | 1X 0~10V output |

| Code | Dry contact output |
|------|-----------------------|
| 0 | No dry contact output |
| 1 | 1X dry contact output |

| Code | Humidity option |
|------|-----------------------------|
| RH | Relative humidity detection |

| Code | Power supply |
|------|--------------|
| A | 220/240VAC |
| B | 100/120VAC |
| C | 24VAC |



Note: X2 + X3 = 1

Example: F2000IAQ-CO₂-3100 indicates that it is a CO₂ indicator with temperature detection.