

CO₂ COMPOSITIVE CONTROLLER

Model:F2000IAQ-CO2-5202S/5203S

CO₂ & Temperature & Humidity Multiple Controller

Solution of Greenhouses, Other Relevant Field of Agriculture, Food, Vegetable Storage etc.

□ Features

- ◆ Especial design for agriculture equipments such as greenhouses, food and vegetable storages. Real-time detecting CO₂ level, temperature and humidity with programmable logical control.
- ◆ Large LCD with orange back light display. Each step of programming and control process can be displayed on the LCD.
- ◆ Compositive design and convenient connection with a metal housing.
- ◆ Carbon dioxide sensor, temperature sensor and humidity sensor are internal, the three values can be apart set.
- ◆ Non-Dispersive Infrared Detector (NDIR) CO₂ sensor, 15 years lifetime. CO₂ setting range is selectable: 0~2000ppm / 0~20000ppm / 0~50000ppm
- ◆ Special ABC Logic with patented Self Calibration Algorithm makes the CO₂ sensor used well without calibration amending
- ◆ Providing two or three relays outputs to control CO₂ generator and a ventilator, or control CO₂, temperature, humidity
- ◆ Strong locale programmable makes CO₂ control more exact and convenient, as well as meets various application.
- ◆ Specially designed for locale mounting with combine 16amp outlet loads
- ◆ CO₂ relay output selectable as the fan on: CO₂ generator active or CO₂ generator off.
- ◆ Photosensitive sensor detection makes the working mode of CO₂ generator changeover automatically.
- ◆ Provide brightness adjustment range to make end users setting day/night limit.
- ◆ RS-485 communication interface with 15KV antistatic protection makes the controller connecting with a PC
- ◆ Strong functions& High performance with Low prices.

□ Application

F2000IAQ-CO₂ -5202S/5203S multiple controller is used to control CO₂ level, temperature and humidity in order to offer good environment for plants growth. It can control a CO₂ generator and a ventilator directly with max. 16amp together, and it provides RS485 network interface to be connected with a PC or other systems. It will be used in below application:

1. Greenhouses, which include vegetable planting houses and flowers planting houses, etc.
2. Modern hydroponics gardens
3. Other relevant fields of agriculture
4. Keep food and vegetable on fresh

□ Specifications

Gas detected	Carbon Dioxide (CO ₂)
Sensing element	Non-Dispersive Infrared Detector (NDIR)



Temperature influence	0.2% FS/
Temp. influence correction	Self compensation
Precision	@22 (72) ± 40ppm + 3% of reading
Stability	<2% of FS over life of sensor (15 yr typical)
Calibration interval	ABC Logic Self Calibration Algorithm
NDIR life	15 years
Flow rates	Diffusion version 80 ~ 120 cc/min
Non linearity	<1% of FS
Pressure dependence	0.13% of reading per mm Hg
Altitude calibration	Programmable from 0-9,900m in 100m increments
Response Time	<2 minutes for 90% step change
Signal update	Every 2 seconds
Warm up time	24hours (first time) 5 minutes (operation)
CO ₂ measuring range	0 ~ 2,000ppm (default) 0 ~ 20,000ppm 0 ~ 50,000ppm
CO ₂ setting & Display resolution	1ppm
Temperature sensor	NTC
Humidity sensor	HS series capacitive sensor
Temperature measuring range	0 ~ 50 (32 ~ 122)
Temperature setting range	5 ~ 45 (41 ~ 113)
Humidity measuring range	0 ~ 99%RH non condensing
Humidity setting range	5 ~ 95%RH non condensing
Relay output	Two or three relays with power supply outputs to control CO ₂ and ventilation or control CO ₂ , temperature, humidity. 16 Amp maximum combined load
Communication interface	RS-485, 9600/14400/19200(default)/28800 or 38400bps (programmable selection), 15KV antistatic protection
Power supply	220VAC~240 VAC or 100~120VAC, 50/60HZ ± 10%, selection with orders
Consumption	5 W max. ; 3.5 W average
Operation conditions	0~50 (32~122) ; 0~95%RH, non condensing
Housing	Metal material
Net weight/ Gross weight	2.2Kg /2.5Kg
Max. Dimensions	240mm × 160mm × 65mm
BNC of power	American standard / European standard selectable
LCD	Green/ Orange backlight: 88 mm × 54mm
Quality system	ISO 9001

□ **Models**

Model	Description
F2000IAQ-CO ₂ -5202S -(A)/(B)	Special for green houses and other agricultural fields. CO ₂ & temperature & humidity detection to control a CO ₂ generator and a ventilator, photosensitive sensor detection to control CO ₂ generator day/night working mode. RS485 communication interface. Power supply: (A): 200/240VAC (B): 100/120VAC 50Hz
F2000IAQ-CO ₂ -5203S -(A)/(B)	Special for green houses and other agricultural fields. CO ₂ & temperature & humidity detection to control a CO ₂ generator and temperature & humidity devices, photosensitive sensor detection to control CO ₂ generator day/night working mode. RS485 communication interface. Power supply: (A): 200/240VAC (B): 100/120VAC 50Hz

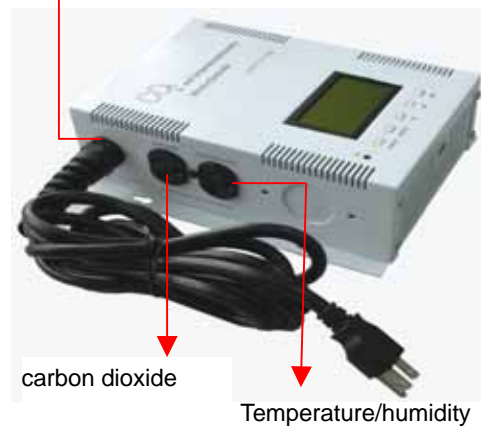
□ **Shipping Information**

India. Ctn. Dim	28.5cm×28.5cm×8.5cm
Master Ctn. Qty	5
Master Ctn. Dim	44cm(L)×32cm(W)×32cm(H)
Master Ctn. Wt.	12.3 KG

□ **Wiring Connection**



power: 100/120VAC or 200~240VAC
16Amp max. 1phase



16 Amp maximum combined outlet load

