

# CO<sub>2</sub> DETECTOR/ CONTROLLER WITH ALARM

WITH TEMPERATURE AND HUMIDITY DETECTION

PRODUCT BROCHURE

## PRODUCT DETAIL

- Real time carbon dioxide detection and monitoring
- Temperature and humidity detection and display
- Three-colour backlit LCD and buzzer alarm
- Provide 1 x on/off output to control a ventilator
- Wall mounting and desktop designs
- Can be used as standalone ventilation controller
- CE-approval



## FEATURES

- Designed for real time monitoring room CO<sub>2</sub>
- NDIR infrared CO<sub>2</sub> sensor with Auto Self Calibration
- Long life and reliable CO<sub>2</sub> sensor
- Temperature and humidity monitoring
- Three-colour (green/yellow/red) LCD backlit indicating ventilation optimal/moderate/poor based on CO<sub>2</sub> measurement
- Integrated buzzer alarm and warning through backlight colour change
- Provide optional 1x relay output to control ventilation
- Easy touch override button
- Choice of mains 240VAC or 24VAC/VDC power selectable while ordering; power adaptor available; desktop and wall mounting type versions available
- EU standard and CE-approval

## APPLICATION

- New HWM – CO<sub>2</sub> monitor/alarm is used for monitoring room CO<sub>2</sub> level, as well as room temperature and humidity. It provides one on/off output to control ventilation with four CO<sub>2</sub> levels presetting. Especially it provides both buzzer alarm and three colours backlit switching alarm.
- Hotel, exhibition hall, hospital, shop, restaurant, airport, train station, theatre and other public places
- House, villa, office, meeting room, classroom and other rooms
- All ventilation systems

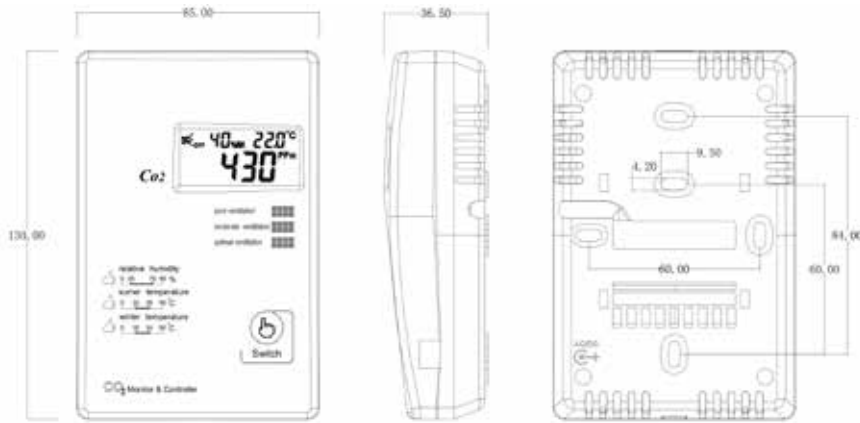
### SPECIFICATIONS

Target gas	Carbon Dioxide (CO <sub>2</sub> )
Sensing element	Non-Dispersive Infrared Detector (NDIR)
Accuracy@25°C (77°F)	±60ppm + 3% of reading
Signal Stability	<2% of FS over life of sensor (15 years typical)
Calibration interval	Auto Self Calibration Algorithm
NDIR life	15 years
Response Time	<2 minutes for 90% step change
Signal refresh rate	Every 2 seconds
Warm up time	<3 minutes (between operations)
CO <sub>2</sub> Measuring range	0~5,000ppm
CO <sub>2</sub> Display resolution	1ppm
Power supply	100~240VAC or 10~24VAC/VDC (please select when placing order)
Consumption	3.5 W max. ; 2.5 W avg.
Temperature sensor	NTC 5K
Humidity sensor	Capacitive sensor
Temperature measuring range	-20~60°C (-4~140°F)
Humidity measuring range	0~99%RH
Relay output (optional)	One relay output with 3A rated switching current (resistive load only)
Operation conditions	0~50°C (32~122°F); 0~95%RH, non-condensing
Storage conditions	-10~60°C (14~140°F) 5~95%RH non condensing
Weight	200g
Dimensions	130mm(H)×85mm(W)×36.5mm(D)
Installation	Desktop and wall mountable (65mm×65mm or 2"×4" wire box)
Housing and IP class	PC/ABS fireproof plastic material, protection class: IP30
Standard	CE-Approval

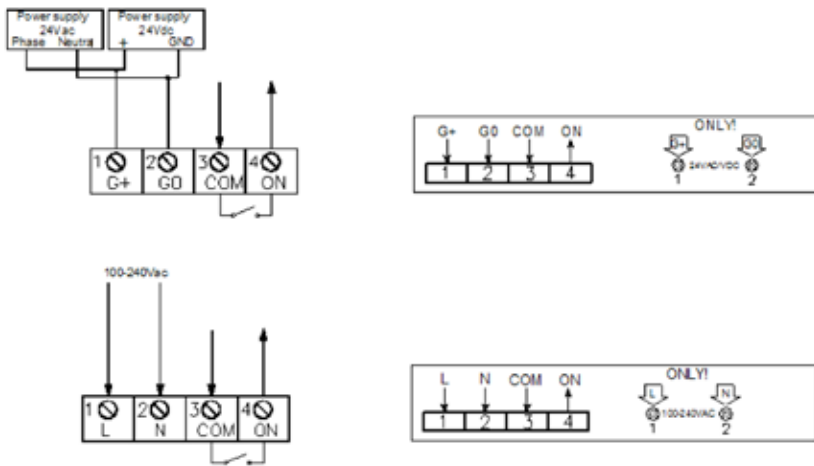
## MODELS SELECTION

Model	Name	Description	Power Supply	Type
HWM-CO2-B320D	CO <sub>2</sub> , temperature and humidity monitor/alarm	Three-colour backlit LCD, buzzer alarm	100~240VAC	Wall mounting
HWM-CO2-B320D-NR	CO <sub>2</sub> and temperature monitor/alarm (no RH option)	Three-colour backlit LCD, buzzer alarm	100~240VAC	Wall mounting
HWM-CO2-B331C	CO <sub>2</sub> , temperature and humidity monitor/alarm	Three-colour backlit LCD, buzzer alarm	18~24VAC/VDC with a DC socket	Wall mounting
HWM-CO2-B331C-NR	CO <sub>2</sub> and temperature monitor/alarm (no RH option)	Three-colour backlit LCD, buzzer alarm	18~24VAC/VDC with a DC socket	Wall mounting
HWM-CO2-B340C	CO <sub>2</sub> , temperature and humidity monitor/controller	Three-colour backlit LCD, buzzer alarm; 1 on/off output; touch-key for operation	18~24VAC/VDC	Wall mounting
HWM-CO2-B340C-NR	CO <sub>2</sub> and temperature monitor/controller (no RH option)	Three-colour backlit LCD, buzzer alarm; 1 on/off output; touch-key for operation	18~24VAC/VDC	Wall mounting
HWM-CO2-B340D	CO <sub>2</sub> , temperature and humidity monitor/controller	Three-colour backlit LCD, buzzer alarm; 1 on/off output; touch-key for operation	100~240VAC	Wall mounting
HWM-CO2-B340D-NR	CO <sub>2</sub> and temperature monitor/controller (no RH option)	Three-colour backlit LCD, buzzer alarm; 1 on/off output; touch-key for operation	100~240VAC	Wall mounting
HWM-CO2-B360D	CO <sub>2</sub> , temperature and humidity monitor/controller	Three-colour backlit LCD, buzzer alarm; 2 on/off output; touch-key for operation	100~240VAC	Wall mounting
Optional Accessories				
870	Power adaptor	Input:100~240VAC, Output: DC 24V/ 240mA	Just for G01-CO2-B331C or G01-CO2-B331C-NR	
921	Wall mounting plate	Accessory for wall mounting		
921+922	Desktop bracket	As be the desktop type	Just for G01-CO2-B331C or G01-CO2-B331C-NR	

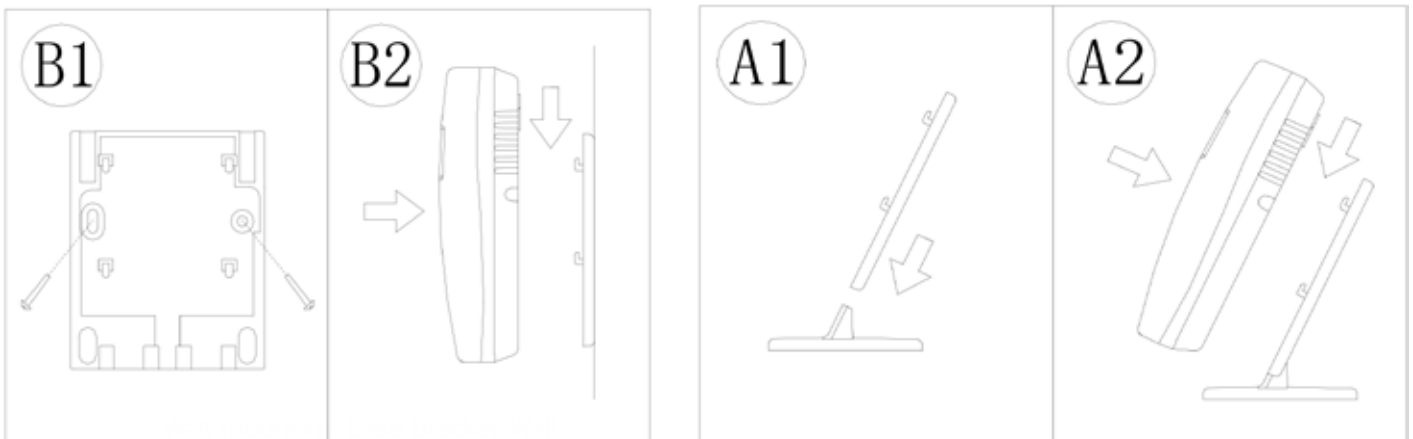
## DIMENSIONS AND MOUNTING



## WIRING DIAGRAM



## 921-WALL MOUNTING PLATE



Mounting base bracket (921)

Desktop bracket (921+922)