

## Features

- ❑ Designed for real time monitoring of carbon dioxide levels in rooms.
- ❑ NDIR infrared CO<sub>2</sub> sensor inside with special Self Calibration System. It makes the CO<sub>2</sub> measurement more accurate and reliable in use.
- ❑ More than 10 years lifetime of CO<sub>2</sub> sensor.
- ❑ Real time carbon dioxide detection and monitoring.
- ❑ Temperature and humidity detection and display.
- ❑ Three-color backlit LCD and buzzer alarm.
- ❑ Provide 1x on/off output to control ventilator.
- ❑ 220VAC or 24VAC/VDC power selectable; power adaptor, desktop and wall mount options.
- ❑ EU standard and CE-approved.



This unit is a comprehensive index, which includes room temperature, humidity and carbon dioxide level. Monitoring CO<sub>2</sub> levels is very important to guarantee a healthy life and working environment. Air pollution caused by decoration, paints on new furniture or wall, smoke from cigarette, and cookers has become an invisible killer to humans, especially to infants, pregnant mothers and senior citizens. It can also cause nerve disorder or weak immunity, which is a potential danger to health.

### Health Problems Associated with Carbon Dioxide

There are many factors that determine if one might get sick due to exposure to carbon dioxide. These include:

**The concentration and amount of carbon dioxide:** Carbon dioxide is naturally present in the atmosphere at levels of about 100-500 ppm. Exposure of healthy individuals for prolonged periods of 1000-1500 ppm carbon dioxide will cause mild problems while exposure to 1500-2000 ppm carbon dioxide will produce unconsciousness over a prolonged period of time. That is because at higher concentrations, carbon dioxide can displace the oxygen in the air. Because of this, carbon dioxide is called a "simple asphyxiant."

### Health Problems (concentration)

**1000-1500 ppm** - Headaches, Dizziness, Restlessness, Feeling of an inability to breathe, Sweating, Malaise (vague feeling of discomfort), Increased heart rate, Increased blood pressure, Visual distortion.

**1500-2000 ppm** - Impaired hearing, Nausea/vomiting, Loss of consciousness (prolonged period).

**2500 ppm & above** - Coma, Convulsions, Death from asphyxiation. With asphyxiation, body cells do not get the oxygen they need to live (prolonged exposure).

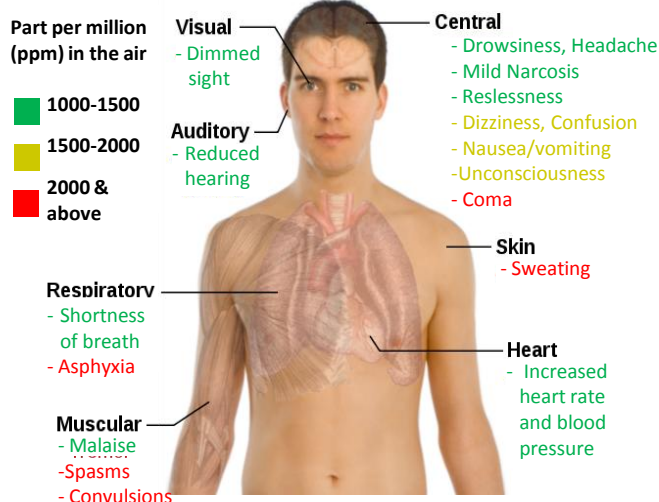
## Specifications

Gas detected	Carbon Dioxide (CO <sub>2</sub> )
Sensing element	Non-Dispersive Infrared Detector (NDIR)
Accuracy @25°C (77°F)	±50ppm + 3% of reading
Stability	<2% of FS over life of sensor (15 yr typical)
Calibration interval	ABC Logic Self Calibration Algorithm
NDIR life	5 years
Response Time	<2 minutes for 90% step change
Signal update	Every 2 seconds
Warm up time	2 hours (first time) 2 minutes (operation)
CO <sub>2</sub> measuring range	0~2,000ppm
CO <sub>2</sub> Display resolution	1ppm
Power supply	100~240VAC or 10~24VAC/VDC selectable in the order
Consumption	3.5 W max. ; 2.5 W avg.
Temperature sensor	NTC 5K
Humidity sensor	HS series capacitive sensor
Temperature measuring range	0~50°C (32~122°F)
Humidity measuring range	0~99%RH
Relay output (optional)	One relay output with rated switching current: 3A, resistance load
Operation conditions	0~50 (32~122); 0~95%RH, non condensing
Storage conditions	-40~70°C (-40~158°F)
Weight	200g
Dimensions	130mm(H)×85mm(W)×36.5mm(D)
Installation	Desktop and wall mounting (65mm×65mm or 2"× 4" wire box)
Housing and IP class	PC/ABS fireproof plastic material, protection class: IP30
Standard	CE-Approved

## Applications:

- Hotels, exhibition halls, hospitals, shops, restaurants, airports, train stations, theaters and other public places.
- Houses, villas, condominiums, offices, meeting rooms, classrooms and other rooms.
- All ventilation systems to gauge optimum performance.
- AHU rooms.

## Carbon dioxide toxicity



## Contact Details

Sales Inquiry