

Carbon Dioxide / Temp & Humidity Meter

User Manual



Content

Introduction to products	3
Latest carbon dioxide concentration and human physiological reaction.....	3
Key function	4
Product parameter.....	6
Procedure for use.....	7
Function setting	8
Considerations	8

Introduction to products

Thank you for purchasing carbon dioxide temperature and humidity detector. This instrument may be used to measure concentration, temperature and humidity of carbon dioxide.

Excessive indoor carbon dioxide will result in fatigue easily, not easy to concentrate on or even sick building syndrome. Good indoor environment is great benefit to body health and can enhance immunity of the body and reduce morbidity.

Carbon dioxide detector has important function in agriculture. For example, in vegetable greenhouses, the content of carbon dioxide reduces seriously due to the effect of photosynthesis in daytime. If carbon dioxide is not supplemented in time, the growth speed of plant will slow down seriously. Timely use of carbon dioxide and observation of indoor content are helpful for response in time so as to reduce loss.

The common fields with application of carbon dioxide detector includes factory buildings, workshops, greenhouses and clean rooms and all types of carbon dioxide monitoring in Industry and agriculture, families, villas, offices, meeting rooms, classrooms and other places requiring ventilation control and environmental quality monitoring, hotels, exhibition halls, hospitals, department stores, bars, restaurants, airports, train stations, entertainment halls, movie theaters and public sites requiring ventilation control and environmental quality monitoring and units producing and using carbon dioxide and so on.

Carbon dioxide concentration and human physiological reaction

- a) 150~350: Do not exist in natural environment
- b) 350~450ppm: the same as common outdoor, open-air environment
- c) 450~1200ppm: fresh air, smooth breadth
- d) 1200--2500ppm: feel that the air is turbid and begin to feel sleepy.
- e) 2500~5000ppm: feel headache, drowsiness, sluggishness, aprosexia, tachycardia and mild nausea
- f) Larger than 5000ppm: may result in serious anoxia, caused permanent cerebral injury, coma or even death.



☹️	High: >1,600ppm
	High: >1,400ppm
	High: >1,200ppm
😐	Good: >1,000ppm
	Good: >8,00ppm
	Good: >600ppm
😊	Excellent: >400ppm
	Excellent: >200ppm
	Excellent: <200ppm

9 Level analog bar: Showing CO2 concentration

Key function

The meter has a simple operating setting with 5 buttons.

Setting CO2 alarm value :

Press Key 1 to enter CO2 concentration setting mode, use Key 2 (▲) and 3(▼) to either increase or decrease the CO2 alarm level value by 100ppm (max. 9,999 ppm) through each step. After the desired alarm level is reached, press Key 1 to exit to normal operation.

The alarm level is retained even after the meter is powered down.

Muting CO2 Alarm


When measured CO2 concentration level is higher than the preset alarm level, the meter's buzzer would sound and remain sounding until measured CO2 is reduced. Pressing Key 4 would mute the buzzer when it is sounding.

The mute status is not retained after the meter is powered down.

Temperature Display Unit

Press Key 5 to switch between temperature display in °C or °F

1. MODE key: set carbon dioxide concentration alarm value
2. ▲: increase the CO2 alarm value
3. ▼: decrease the CO2 alarm value

4. : on or off
5. °C / °F: switching between °C and °F



Product parameter

Carbon dioxide (CO₂)

Scope: 0~9999 ppm

Precision: 70ppm $\pm 3\%$ reading

Warm-up Time: 2 minutes

Working conditions: 5~30°C (0 to 85%RH)

Temperature

Scope: 0~75°C (32~167°F)

Resolution ratio: 0.10 °C/°F

Precision: ± 0.30 °C / ± 0.6 °F (10~55°C/50~131°F),

The rest is: ± 1.5 °C

Humidity:

Scope: 0.1~99.9%

Resolution ratio: 0.1%

Precision: $\pm 3\%$ Typ.

Procedure for use

Connect the DC power supply adaptor to especially equipped for the product to an AC power source and connect the other end to the this meter product.

After the product is switched on, the display will show countdown of 7s for preheating of CO₂ sensor, the product would operate and display after the countdown.

Display of the main panel is divided into four parts. The top row displays carbon dioxide concentration. The lower left row displays temperature, the lower right displays humidity; the left side is an analog LED bar showing CO₂ concentration.



Function setting

1. MODE: under normal use state of the product, press MODE key to enter 1200 alarm value (the alarm value is factory value). Then (▲) and (▼) keys are pressed for setting. After setting is completed, press MODE key once to exit from the setting state to return to normal detecting state or exit from setting state without any operation within 30 seconds.
2. ▲: The key does not function unless pressing MODE key to enter setting state.
3. ▼: The key does not function unless pressing MODE key to enter setting state.
4. 🔊: Select switching on/off the sound after the set alarm value is reached.
5. Press once to switch off the sound and press again to switch on the sound.
6. °C/°F: Press once to switch to °F and press once again to switch to °C.

Considerations

1. The product requires the power adaptor equipped for the device to avoid unnecessary trouble.
2. The product may be placed on counter or flat place for use.
3. When the product is hung on wall, it cannot be hung unless the fixing screws are fixed well.
4. Water is not permitted to enter the product. The product is not anti-drop. Please take care of it.
5. The product should be used by following the working condition required in product parameters to avoid poor condition and mistaken reading.