wintact®

MODEL: WT8807

Carbon Dioxide Monitor

Instruction Manual

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Ⅰ. Introduction

Carbon Dioxide Monitor adopts high-quality gas sensors,which displays safety and reliability with accurate measurement and stable performance. It has excellent sensitivity and repeatability, easy to use and maintain, and meets the requirements by safety monitoring in industrial site for high reliability of the equipment. The shell is made of high-strength engineering plastics and compound non-slip rubber, dust and explosion-proof, with high strength and smooth handfeel.

Carbon Dioxide Monitor is widely used in petroleum, chemical, environmental protection, metallurgy, refining, gas transmission and distribution, biochemical medicine, agricultural research,etc.

To know and understand relation between carbon dioxide concentration and human physiological reaction:

- ► 350-450ppm: the same as general outdoor environment
- ► 350-1000ppm: fresh air and; smooth breath
- ► 1000-2000ppm: turbid air; feel sleepy
- ► 2000-5000ppm: headache, sleepiness, dull, heartbeat accelerating and lightly nauseous and be unable to concentrate
- ► Over 5000ppm: severe hypoxia, permanent brain damage,coma and even death

Ⅱ. Safety instruction

For your safety, please read this manual before operation.

⚠:This operation may induce physical hazard to users. Please be careful.

⃠:This operation may cause damage to the instrument.Please be careful.

⚠ Warning!

If there is explode accident happening:

- ❍ Cut off all the potential gas resource.
- ❍ Keep the rescuing area ventilated and no potential combustible gas existing.
- ❍ Switch off all the power connection.
- ❍ Evacuate all the people in the area.
- ❍ Report to the authorities immediately.

In daily work, please keep the work environment ventilated,for good ventilation can ensure that combustible gas will not accumulate.

III. International safety knowledge

⚠ This operation must refer to instruction.Please be careful.

CE Complying with eu standard.

Explosion-proof sign: Ex ib IIB T3 Gb.

IV. Explosion protection precautions

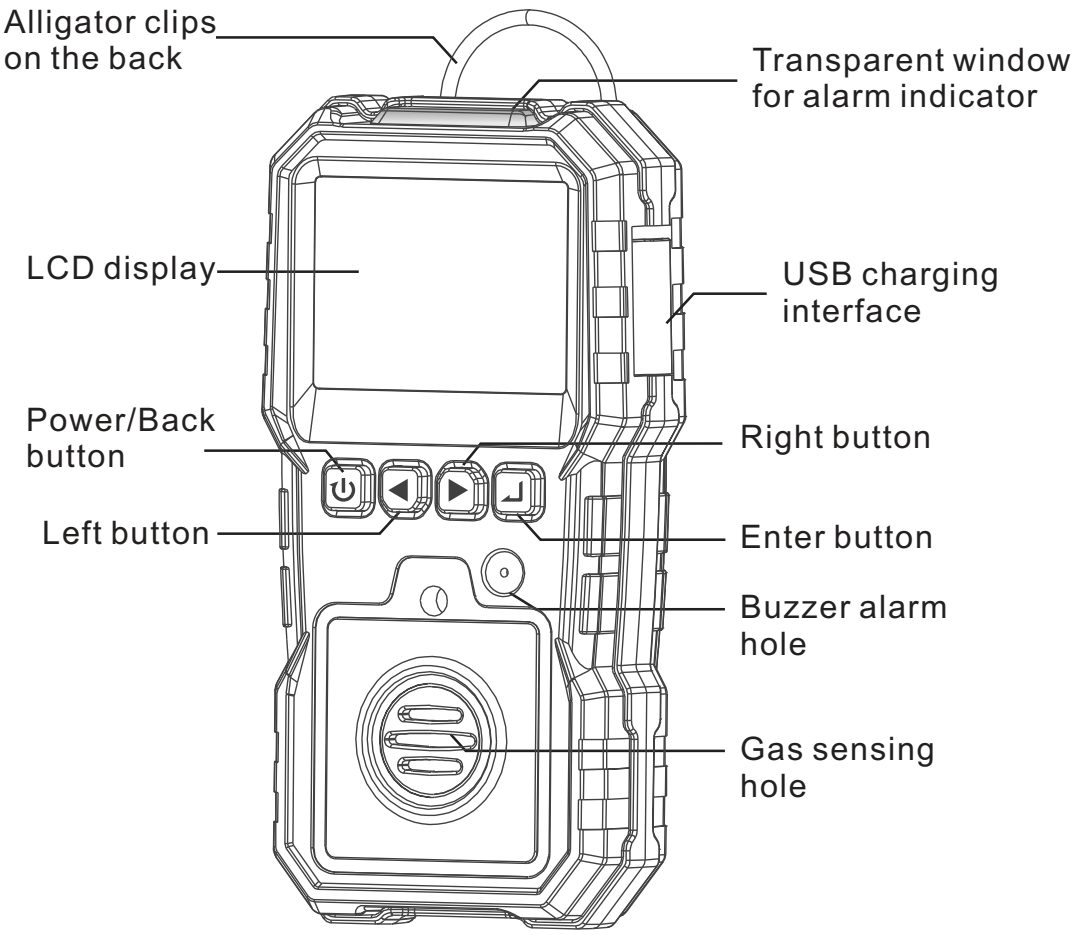
⚠ Warning!

1. Charging in the off state is unable to turn on the gas detection alarm for detection. Please do not charge the gas detection alarm at the inspection site to avoid fire or explosion caused by the spark generated by the plug-in charger.
2. Please do not disassemble, replace or replace the sensor in an explosive atmosphere, and do not use peripheral plug-in equipment that is not certified for explosion-proof.

V . Features

- Color-screen display, user-friendly interface.
- Bilingual choices:Chinese/English.
- Two alarm forms:sound/light.
- Data recording and review function, continuously record 7605 data.
- Charging function.

VI. Name of parts



* Power/Back button : long press on/off button, short press to return.
* Left button: left forward, upward, decrease.
* Right button: right forward, downward, increase.
* Enter button: Enter interface

VII. Operation manual

1.Main Menu Interface (Figure 1)

(1) Long press Power/Back button for about 2 seconds. After powering on, the instrument enters into the countdown interface (for the sensor takes about 20 seconds to stabilize).After the countdown is over, the main menu screen will appear (Figure 1).

(2) The current date and time are displayed on the upper left corner.If the time is incorrect, enter the settings interface to set.

(3) The battery level is displayed on the upper right corner. When the remaining power is low, the battery indicator will turn red. When the ower level is detected to be too low, the instrument will start 10s countdown for automatic shutdown.The countdown second will be displayed on the left side of the battery indicator. After the countdown is over, the instrument will automatically shut down.

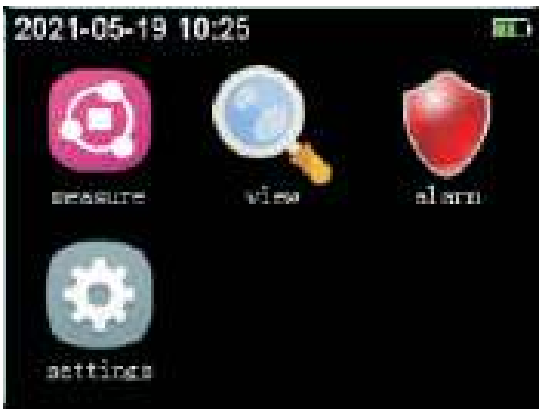
(4) There are four icon options in the main menu, namely, real-time measurement, checking record, alarm setting and system setting;

(5) Functions of Buttons:

1) : When the icon is selected, touch the icon and it will turn unselected, touch it again to go back to the first icon (unslected).

2) : If an icon is not selected, touch the icon and it will become selected. Touch it again to select the next icon by pressing Left/Right button.

3) : If an icon is not selected, touch it once and th icon will turn selected; when the icon is selected, press confirm button to enter the corresponding interface of the icon.



Main Menu Interface (Figure 1)

2.Real-time Measurement Interface(Figure 2)

(1) This interface only displays Real-time measurement values; the left side shows the maximum,minimum and average value,where the average value which is the value measured in the last 4 minutes; the right side shows the high and low alarm values, and the middle shows real-time values.

(2) When checking concentration, if the concentration value is greater than the low alarm value, the instrument will trigger low alarm state. If the concentration is greater than the high alarm value, the instrument will trigger high alarm state;

(3) In alarm state, Danger icon shows up; otherwise, Safety icon is displayed.

(4) In the alarm state, if the alarm is triggered, an alarm will be issued and the alarm will be issued when the alarm is high.The alarm in high alarm state shows more urgency and faster frequency than that of low alarm state.

(5) The alarm has two forms, light flashing alarm and sound alarm, which can be turned on/off in the alarm setting.

(6) The lower left corner of the screen shows the lower limit of the range, the lower right corner shows the upper limit of the range, the lowermost triangle indicates the color of realtime value.

(7)Function of buttons:

1) : back to main menu interface.

2) : No use

3) : No use.

Real-time Measurement Interface (Figure 2)

3.Record Checking Interface(Figure 3~Figure 8)

(1) After entering record checking interface(Figure 3) , From left to right,the screen shows the number of each record, start time of record,number of record groups,record interval (seconds); each record can store 507 pieces of data, and a total of 15 groups of records can be stored (7,605 records in total). When the stored data is full,"FULL" will appear at the top of screen.The bottom shows the selectedpage number and total page number;which is page selection interface.

Press "⏻" button to return to main menu,and press "◀ / ▶" button to choose previous or next page.After selecting page number, press "↵" button to choose one record and enter into record selection interface, as shown in Figure 4.

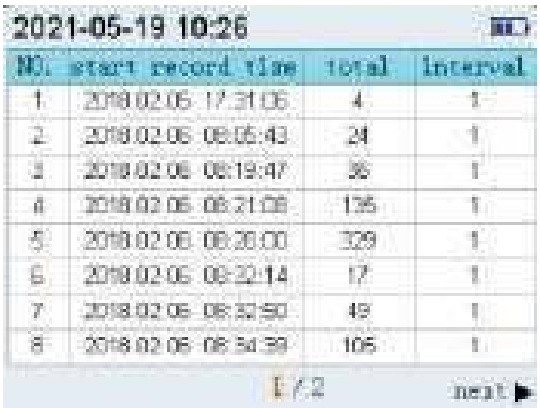
(2) In record selection interface shown in Figure 4, press "⏻" button to return to page selection interface.Press "◀ / ▶" button to choose previous or next page .Press "↵" button to check, delete, and choose which data to be delete (Figure 5).

(3) In record selection interface shown in Figure 5, press "⏻" button to return to record selection state Press "◀ / ▶" button to check, delete, and choose which data to be deleted. Press "↵" button to enter into interface for checking (Figure 6), deleting (Figure 7) and selected deletion (Figure 8).

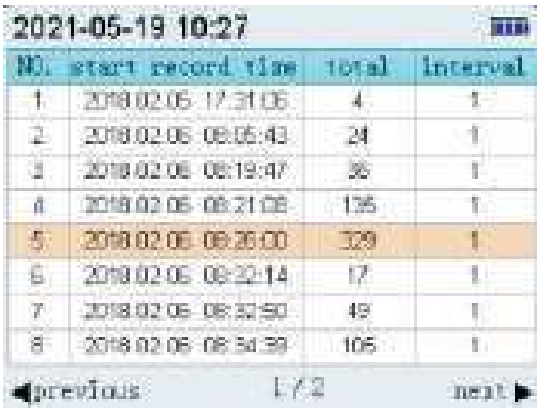
(4) The interface shown in Figure 6 is a reviewing recorded data interface, and the box above shows the number of recorded data in different numerical ranges. For example, the green bar graph with 53 in the figure indicates that 53 values in the recorded data are between 549 and 609. The maximum, minimum and average value of recorded data are displayed on the right side.the concentration value 552 displayed in the middle is the value of the data point pointed out by red line; the lower right corner reads 1/329, where 1 is the data point number, and 329 is the group number of the recorded data; ■ is an icon back to the start point, select the icon and press the "↵" button, the data point number will return to 1,and the red line goes back to the beginning; ▶ is an icon for starting, after selecting it,the recorded data will automatically start reviewing, and the icon will turn into ||, after selecting it,the automatic review will stop, the icon will turn into ▶; < is an icon for moving leftwards, after selecting it and confirming, the red line will move to the left; > is an icon for moving rightwards, after selecting it, the red line will move to the right; << is an icon for fast moving leftwards; >> is an icon for fast moving rightwards.

(5) Figure 7 shows deletion interface. After selecting "Yes" and confirm,the recorded data will be deleted.

(6) Figure 8 shows selected deletion interface. Pressing "◀/▶" button and "↵" button to input the serial number to be deleted, select "OK" and press "↵" button.After that, the data within the range of serial number will be deleted.

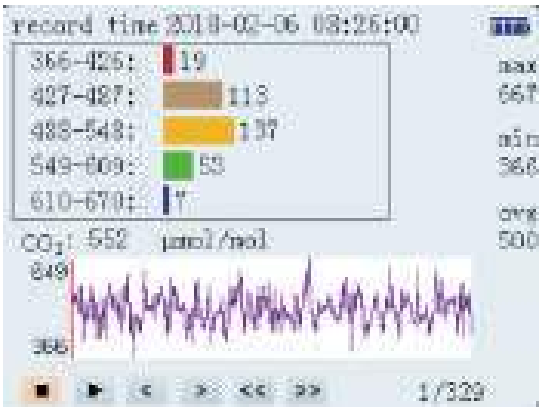


Page selection interface (Figure 3)



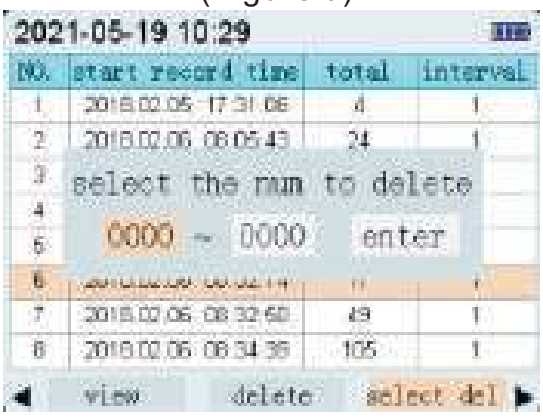
Record Checking Interface(Figure 4)

Checking delete interface(Figure 5)



Record data playback interface (Figure 6)

Deletion Interface (Figure 7)



Selected Deletion Interface (Figure 8)

4.Alarm Setting Interface(Figure 9)

(1) The alarm settings for each sensor can be set separately under this interface.

(2) There are two alarm modes: light and sound, which can be respectively set to be on or off. When the realtime measured value is greater than the set high alarm value or low alarm value , the alarm which is set to be on will be triggered.

Alarm Setting Interface(Figure 9)

5.System Settings Interface(Figure 10)

(1) There are six setting items under the interface: language, date and time, auto storage, auto power off, backlight setting, and reset default.

(2) The language can be Chinese or English; date and time can be set as year, month, day, hour, minute;if auto storage is on, the measured data will be automatically saved according to the set recording interval. If not, it will not be stored automatically; if the auto off is on, if there is no button operation within the set shut-down time, it will automatically shut down. If auto off is not on,it will not automatically shut down; in the backlight setting, there are two levels of backlight brightness;restoring factory setting can restore all para meters except for date and time in the instrument to factory state.

System settings interface(Figure 10)

Ⅷ. Specifications

Gas detection	CO_2
Measuring range	0~10000μmol/mol[1]
Resolution	1
Accuracy	±40μmol/mol±3%[2][3]
Response time (90%)	About 2 minutes
Indication mode	LCD displays real-time data and system state, LED and sound indication alarm
Storage Conditions	Temperature: -10~55℃; Humidity:<85%RH non-condensing
Operation Conditions	Temperature: 0~50℃; Humidity:<85%RH non-condensing
Working voltage	DC 3.7V (Lithium battery capacity 1800mAh)
Battery Model	LP103450-1800mAh
Charging time	About 4 hours
Standby time	More than 8h on end (slightly change with working state)
Dimensions	71*153*49mm
Weight	215.4g(with battery and back button)

[1]1μmol/mol = 1PPM

[2] The accuracy is specified in an environment with a temperature of 25°C and an air pressure of 101.3kPa

[3] If the reading is within the range of 400~2000μmol/mol, the accuracy is ±40μmol/mol±3%. If it exceeds this range, the accuracy will become larger.

IX. Charging function description

When the power is insufficient or the voltage cannot be turned on due to undervoltage, please charge in time and charge it.During the charging process, the alarm light will flash and the meter will no longer detect the gas concentration and display it dynamically.Indicates the number of battery packs. When the number of battery packs is full and no longer changes dynamically, charging is completed.When you can unplug the charger, the meter can be used normally.

X . Warnings and Precautions

Improper operation or environment may cause accidents.

1. The instrument is strictly prohibited from collision, falling from high places or violent vibration.
2. If there is gas of high concentration, the instrument may not work properly.
3. Please operate and use strictly in accordance with the instruc tions, otherwise it may result in inaccurate test results or damage to the instrument.
4. Do not store the instrument in the following environments:
   a. Places that may have water or heavy dust.
   b. The instrument must not be stored and used in environments that contain corrosive gases (such as salt or sulfur in high concentration, etc.).
   c. Air with other gases or chemicals.
   d. Places of high temperature, high humidity or direct sunlight, including environments of too high and low temperatures, high humidity, electromagnetic fields, and strong sunlight.
5. Cleaning of the instrument's surface:
   a. The window of the sensor must be kept clean. If it is dirty, the measurement will be inaccurate.
   b. Please wipe it gently with a clean, soft cloth dampened with water (do not use alcohol, diluent, etc. to clean the case, especially for the LCD window.).
6. If the instrument breaks down, please contact our professional personnel to repair it. Other people shall not change components and wiring.

⚠ Warning:
Prohibit charging or disassembling batteries in an explosive environment!

XI. Product accessories list

Thanks for your purchasing our product, please check the following components after you unpacking the box. If there is any missing or wrong page manual,please contact the local dealer.

Accessory name	Quantity
Carbon Dioxide Monitor(Contain Alligator clips)	1PCS
USB charging cable	1PCS
Instruction Manual	1PCS

TIPS:
This device is equipped with rechargeable battery.If you receive the product and cannot start up,please connect with the adapter for charging before use.

Special Statement:
Our company shall hold no any responisibility resultingfrom using output from this product as an direct or indirect evidence.This company reserves the right of changing the product design and contents of instruction if changed the separate notice isn't given.

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