# INKBIRD IAM-02



Smart Indoor Air Quality
Monitor User Manual





Please keep this manual properly for reference. You can also scan the QR code to visit our official website for product usage videos. For any usage issues, please feel free to contact us at <a href="mailto:support@inkbird.com">support@inkbird.com</a>.

Wenn Sie eine Bedienungsanleitung in deutscher Sprache benötigen, scannen Sie bitte den OR-Code und besuchen Sie unsere Website, um sie zu erhalten und ein Video über die Verwendung des Produkts zu sehen.

Se avete bisogno di un manuale di istruzioni in italiano, scansionate il codice OR e visitate il nostro sito web per ottenerlo e vedere un video su come utilizzare il prodotto. Si vous avez besoin d'un mode d'emploi en français, veuillez scanner le code OR pour visiter notre site officiel

afin d'obtenir et de visionner la vidéo d'utilisation du produit !
Als je een Nederlandstalige handleiding nodig hebt, scan dan de

QR-code om naar onze officiële website te gaan en bekijk de video over het gebruik van het product!
Si necesita el manual de instrucciones en español, escanee el

Si necesita el manual de instrucciones en español, escanee el código QR para ir a nuestro sitio web oficial y ver el vídeo sobre cómo utilizar el producto.

# CATALOGUE

OATALOGGL	05 Installation Instructions1	
0.4	06 Operation Instructions1	
01 Overview01	07 Cleaning and Maintenance2	
02 Technical Specifications 02	-	
03 LCD Screen Definitions/Product	08 Important Notes/Warnings2	
Introduction 05	09 FCC Requirement2	
04 Operating Buttons Definitions11	10 Customer Service2	

## 01 Overview

Of the various indoor gases, CO2 is the one that best represents indoor air quality. High levels of CO2 can cause headaches, fatique, rapid heartbeat, and shortness of breath. Prolonged exposure to high levels of CO<sub>2</sub> can have negative effects on the respiratory system and even lead to diseases such as tracheitis and pneumonia. It is therefore vital to maintain an appropriate range of indoor CO<sub>2</sub> concentrations for the sake of health. That's why we introduced the IAM-02, an intelligent indoor air quality monitor that helps you stay safe and healthy.

# 02 Technical Specification

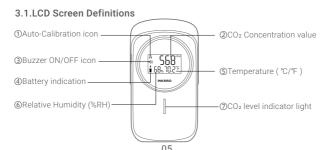
Product name	Smart Indoor Air Quality Monitor	
Model	IAM-02	
Battery capacity	3000mAH Lithium Battery	
Power supply	DC5V/1A with USB Type C charging cable (the cable length is 1M)	
Screen Type	LCD screen with white backlight	

Sampling Interval	1min/2min/5min/10min (default 1min)	
Production Dimension	111*66*21mm	
Production Weight	180g	
Package Dimension	178*105*36.5mm	
Charging time	About 6 hours	
Battery life	more than 12 months	

**Remarks:**When the sampling interval is set to 1 minute, the battery can last for approximately 90 days; when the sampling interval is set to 10 minutes, the battery can last for more than 12 months. The longer the sampling interval, the longer the battery life.

Testing data	Measurement range	Resolution	Accuracy
CO <sub>2</sub> concentration	0-9999ppm	1 ppm	± 40 ppm (±5%)
Temperature value	-9.9℃ - 100℃	0.1 °C (0.1 °F)	±0.2 °C (±0.36 °F)
Relative humidity	0-99%	1%	± 1.8 %

# 03 LCD Screen Definitions/Product Introduction



### ①Auto-Calibration icon:

A When this icon appears, the smart auto-calibration is turned on. When this icon disappears, the smart auto-calibration is turned off.

#### 2CO2 Concentration value:

\*CO<sub>2</sub> PPM (parts per million) ,CO<sub>2</sub> concentration level in ppm (parts per million).

\*Current CO<sub>2</sub> concentration value (ranged from 0 to 9999)

#### (3) Buzzer ON/OFF icon

 $\circlearrowleft$  When this icon appears, the buzzer is turned on; when this icon disappears, the buzzer is turned off.

 $\mbox{NOTE}$ : See Section 4, «Operating Buttons Definitions» , in this manual for details on switching the buzzer on or off.

# **4** Battery indication

- Current battery level.
- The device is charging.
- ⑤Temperature (°C/°F) The temperature of the air in °C or °F
- **6**Relative Humidity (%RH)

The relative humidity of the air, expressed in %RH.

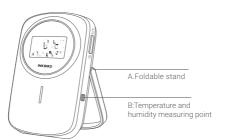
# ⑦CO2 level indicator light

\*If the  $CO_2$  indicator light blinks green 3 times each time the  $CO_2$  concentration value is refreshed, it means that the  $CO_2$  concentration level is in good condition (<1000 ppm).

\*If the  $CO_2$  indicator light blinks yellow 3 times each time the  $CO_2$  concentration value is refreshed, it means that the  $CO_2$  concentration level is in medium condition (1000~1400 ppm).

\*If the CO<sub>2</sub> indicator light blinks red 3 times each time the CO<sub>2</sub> concentration value is refreshed, it means that the CO<sub>2</sub> concentration level is in unhealthy condition (>1400 ppm).

#### 3.2 Product Appearance Introduction





# 04 Operating Buttons Definitions



#### A: °C/°F Switch button

Short press: Change the temperature unit between °C and °F;

#### B:Buzzer button

Short press: Turn on/off the buzzer

Long press: Press and hold the button for 3 seconds to turn on/off the CO<sub>2</sub> concentration calibration

Note: Automatic self-calibration ensures highest long-term stability without the need of manual action steps from the user. The automatic self-calibration algorithm assumes that the sensor is exposed to the atmospheric CO<sub>2</sub> concentration of 400 ppm at least once per week.

Please do not activate automatic calibration if the device has been stored in an environment with CO₂levels≥1000 ppm(e.g., a grow tent) for extended periods. Manual calibration may be conducted when necessary.



# C:Short press both buttons at the same time to go into LCD screen setting mode:

Step 1: Short press both buttons again and the screen will display parameters of 5 modes in turn, i.e. the  $CO_2$  concentration sampling interval "INT", the high  $CO_2$  concentration threshold "Hi", the low  $CO_2$  concentration threshold "Lo", the  $CO_2$  calibration value "CA" and the backlight switch "bLT.

#### Step 2:CO2 sampling interval setting

Short press both "O/F and buzzer buttons at the same time again, the upper LCD screen will display the interval time, the lower LCD screen will display the the "INT". Short press the "C/F or buzzer button to select the sampling interval(1minute, 2 minutes, 5 minutes, or 10 minutes). At last press and hold the "C/F and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.

## Step 3:High CO₂ concentration setting value (range: 300-5000ppm)

Short press both  $^{\circ}C/^{\circ}$  and buzzer buttons at the same time again, the upper LCD screen will display the high CO<sub>2</sub> concentration setting value, the lower LCD screen will display the character "H". Short press the  $^{\circ}C/^{\circ}$  or buzzer button to modify the high CO<sub>2</sub> concentration setting value.At last press and hold the  $^{\circ}C/^{\circ}$  and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.

#### Step 4:Low CO<sub>2</sub> concentration setting value (range: 300-5000ppm)

Short press both °C/°F and buzzer buttons at the same time again, the upper LCD screen will display the low CO<sub>2</sub> concentration setting value, the lower LCD screen will

display the character "Lo". Short press the " $\mathbb{C}/\mathbb{F}$  or buzzer button to modify the low  $\mathbb{C}\mathbb{O}_2$  concentration setting value. At last press and hold the " $\mathbb{C}/\mathbb{F}$  and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.



Short press both °C/F and buzzer buttons at the same time again, the upper LCD screen will display the CO $_2$  calibration value, the lower LCD screen will display the character °CA'. Short press the °C/F or buzzer button to modify the CO $_2$  calibration value. At last press and hold the °C/F and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.

#### Step 6:Backlight off/on setting

|**|**||)\* (8

HI F

Short press both  $^{\circ}$ C/F and buzzer buttons at the same time again, the upper LCD screen will display the backlight working state, the lower LCD screen will display the character "bLT". Short press the  $^{\circ}$ C/F or buzzer button to to turn off/on the backlight. At last press and hold the  $^{\circ}$ C/F and Buzzer buttons simultaneously for 2 seconds or wait 30 seconds without operation to exit and save the setting.



#### D:Power Button

**ON:** Turn on the device **OFF:** Turn off the device

# 05 Installation Instructions

Two ways to place the IAM-02 monitor



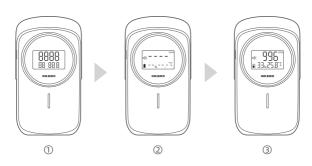
A: Standing on the table



B: Hanging up

# 06 Operation Instructions

- 6.1 Push the switch to the "ON" position to turn on the device, and the device LCD will display as shown below:
- ①: When turning on the device, the LCD screen will display " 8888 " for 3 seconds.
- ②: After 3 seconds, the LCD screen will show " – " and flash for 30 seconds at 1 second interval, indicating that the sensor is warming up for collecting data.
- 3: After 30 seconds, the LCD screen will display the current CO<sub>2</sub> concentration, the ambient temperature, and the relative humidity.



**6.2.1 Low battery alarm:** When the battery is low, the battery level icon"  $\hat{\Box}$  " will flash; after one minute, the device will be automatically turned off.

# 6.2.2 Unhealthy data alarm:

When the sampled value continuously exceeds the alarm value within a period, the buzzer will sound at the first sampling time when the preset alarm value is judged to be exceeded.

# 07 Cleaning and Maintenance

- **8.1.** Do not expose this product to water, or place it in high-temperature environments over 50°C. Keep it away from fire sources.
- **8.2.** This product is a precise measuring instrument, do not disassemble it by yourself.
- **8.3.** Do not place this product in an environment full of dust or corrosive gas for measurement.
- **8.4.** Do not directly expose this product to the sun for long.

#### POSSIBLE SOLUTIONS

The value of CO<sub>2</sub>/ temperature/humidity did not change for a long time

wait for it. If you need to change the sampling time to 2min/5min/10min, please press the  $^{\circ}$ C/ $^{\circ}$ F and buzzer buttons at the same time to enter the LCD screen setting. 2. At the same place, and when the air environment is slightly flowing, the CO<sub>2</sub> concentration is relatively stable, so the value will not change rapidly. This is a stable and accurate method of air quality detection.

1. The device samples once per minute at the fastest. Please

# 09 FCC Requirement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# 10 Customer Service

This item carries a 1-year warranty against defects in either components or workmanship. During this period, products that prove to be defective will, at the discretion of INKBIRD, be either repaired or replaced without charge. For any problems in use, please feel free to contact us at <a href="mailto:support@inkbird.com">support@inkbird.com</a>. We will do our best to help you.

# Shenzhen Inkbird Technology Co., Ltd. support@inkbird.com

Consignor: Shenzhen Inkbird Technology Co., Ltd.

Liantang, Luohu District, Shenzhen, China

Manufacturer: Shenzhen Inkbird Technology Co., Ltd. Factory Address: 5th and 6th Floor, Building 138, No. 71, Yiging Road, Xianhu Community, Liantang Street, Luohu District, Shenzhen, Guangdong, China

Office Address: Room 1803, Guowei Building, No.68 Guowei Road, Xianhu Community,











MADE IN CHINA DESIGNED BY INKRIRD