# **INKBIRD**

IAM-T1



Please keep this manual properly for reference. You can also scan the QR code below to visit our official website for product usage videos. For any usage issues, please feel free to contact us at **support@inkbird.com**.

# 01 Overview

Among various indoor gases, CO2 is the gas that best represents indoor air quality. High concentrations of CO2 can cause headaches, fatigue, rapid heartbeat, and shortness of breath. Prolonged exposure to high levels of CO2 may have negative effects on the respiratory system and may even lead to diseases such as tracheitis and pneumonia.

Therefore, it is vitally important to maintain an appropriate range of indoor CO2 concentration for the sake of health.

That's why we have introduced IAM-T1, Smart Indoor Air Quality Monitor that helps you stay safe and healthy.

### The first choice for family air health and safety

Equipped with the world's leading SENSEAIR air sensor, IAM-T1 ensures high accuracy, high performance, and ultra-low power consumption, with precise and stable detection of indoor air quality.

### • Four-year ultra-long battery life

With ultra-low power consumption sensors and low-power ink screens, using 2 large-capacity AA alkaline batteries, IAM-T1 can operate stably for 4 years with a 10-minute sampling interval, without frequent replacement of batteries, which is simple and convenient.

#### • Intelligent use with Bluetooth 5.0 and mobile APP

The IAM-T1 device locally records data for 30 days, and transfers it to the mobile app via Bluetooth for backup, and displays historical data in a visual form through charts. In addition, it allows users to observe, compare, and analyze long-term monitoring data.

#### · Clear and intuitive electronic ink screen

With high-contrast 180° no-dead-angle visual experience, IAM-T1 provides accurate and clear CO2 concentration level indication, making it easy for users to understand the current air quality.

# 02 Technical Specifications

- · Smart Indoor Air Quality Monitor
- Model: IAM-T1
- Power Source: 2 \* AA alkaline batteries (2500mah)
- Screen: Low-power-consumption and Clear Electronic Ink Screen
- Networking Configuration: Low-power-consumption Bluetooth 5.0
- Bluetooth range: 100m/328ft (no obstructions)
- Sampling Interval: 1min/2min/5min/10min (default 1min)
- Application: INKBIRD APP
   Dimensions: 75\*80\*30mm
- Weight: 138g

Sensor performance	Range	Resolution	Accuracy
CO2 concentration	0 - 9999 ppm	1ppm	± 30 ppm * ± 3 % of reading
Temperature	0 - 50 °C	0.1 °C (0.1 °F)	±0.3 °C (±0.5 °F)
Relative humidity	0 - 85 %	1%	± 3 %
Atmospheric pressure	600 - 1100 hPa	1hPa	-2 hPa / +3 hPa

<sup>\*</sup> CO2 measurement accuracy is provided for a range 0 ... 5000 ppm, temperature 15 ... 35 °C (59 ... 95 °F) and relative humidity 0 ... 80 %. Accuracy above 5000 ppm is 10 % of reading, but not guaranteed since it is extrapolated form the calibrated range.

# 03 Installation Instructions

### Battery Installation

Please install the supplied batteries correctly according to the "+" and "-" marks on the battery compartment.

### Product Installation



Stand on the table





Hang on the wall



### Auto-Calibration icon

 $oldsymbol{\mathsf{A}}$  — the smart auto-calibration is turned on.

— No icon is displayed, the smart auto-calibration is turned off.

### Bluetooth icon

□□ — Bluetooth is turned on but not in the connecting

□ App connecting

— No icon is displayed,Bluetooth turned OFF



Displayed—buzzer sound on the device is turned on;
Disappears—the buzzer sound is turned off.

Note: The buzzer's settings can be adjusted using the INKBIRD app!

4 680 CO2 Concentration Value (ppm)

CO<sup>2</sup> concentration level in ppm (parts per million).



### 6 ---- CO2 Threshold Level Indicator

When the progress bar is within the yellow partillillillil, the CO2 concentration level is in a medium state ( $1000 \sim 1400$  ppm).

Note: These are default thresholds that can be reconfigured using the INKBIRD app.



### **6 26**. $^{\complement}_{5}$ Temperature (°C/°F)

**Temperature:** the temperature of the air in  ${}^{\circ}\!\!\!\!\!C$  or  ${}^{\circ}\!\!\!\!\!F$ .

 $\ensuremath{\text{\textbf{Note:}}} \ensuremath{\text{\textbf{See}}}$  the Key Definitions in this manual to understand how to change temperature unit.

### 55<sub>%</sub> Relative Humidity (%)

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



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### startup Interface

When the device is powered on with a battery installed, it will be initialized. Please wait for a few seconds!



#### CO2 Alarm Interface

When the CO2 level exceeds the preset alarm value, the display on the screen will become black and white. The alarm is triggered by the unhealthy state (red) by default. The alarm value can be customized through the App.



Please replace the battery

### Low Battery Interface

If the battery is exhausted, replace it as soon as possible. Try to use 2\*AA alkaline batteries with a higher capacity. ( $\geq$ 2500mah)

The current temperature is

Operate between 0-50°C

### **Too-low Ambient Temperature Interface**

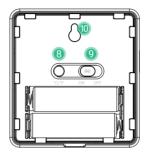
This interface will be displayed when the ambient temperature is lower than 0°C. The temperature measurement range of the device is  $0\sim50$ °C, and temperature beyond the range will affect the normal operation of the device.

#### CO2 Detection Error

The detected CO2 concentration may exceed 9999 ppm. Please do not exhale directly into the device, as the gas concentration from the human body can be as high as 30000 - 50000 ppm. Please use this device within the detection range.







Button:

**Short press:** press it to change the temperature unit, °C/°F.

Tip: When Bluetooth is connecting, press it to pair

Long press: Press and hold the button for 5 seconds to unbind the device and restore it to factory settings.

Bluetooth Switch:

**ON:** Bluetooth is enabled. **OFF:** Bluetooth is disabled.

Wall mount hole

## 05 Buzzer Sound Description

Unhealthy data alarm: When the CO2 concentration reaches an unhealthy state (red), the device emits a soft "beep" buzzing sound.

#### Settings on the App:

- Turn off the buzzer:
- Sound one time: 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.
- Sound every time: When the sampled value continuously exceeds the alarm value within a period, the buzzer will sound every time it is judged that the preset alarm value is exceeded.

## 06 Cleaning and Maintanence

- 1. Do not expose this product to water, do not place it in high-temperature environments over 50℃, and keep it away from fire sources.
- 2. This product is a precise measuring instrument, do not disassemble it by yourself.
- 3. Do not place this product in an environment full of dust or corrosive gas for measurement.
- 4. Do not directly expose this product to the sun for long.

ISSUES	POSSIBLE SOLUTIONS	
The value of CO2/ temperature/humidity did not change for a long time	1. The device samples once per minute at the fastest. Please wait for it. If you need to change the sampling time to 2min/5min/10min, please set it on the App. The longer the sample interval, the longer the battery life.  2. At the same place, and when the air environment is slightly flowing, the CO2 concentration is relatively stable, so the value will not change rapidly. This is a stable and accurate method of air quality detection.	
The device displays "error: 1050"	1. It may be caused by humans exhaling/blowing into the device. The CO2 concentration of the gas emitted by humans can be as high as 30000~50000 ppr 2. It may be that the device stays close to a special place where high concentrations of CO2 are emitted, such as furnaces, smoking, and other hi concentrations of smoke (within 50cm). Do not leave the device continuously in an area with high smoke concentration. Note that this device supports a CO2 concentration detection range of 0-9999 PPM.	
CO <sup>2</sup> calibration	The monitor is calibrated at the factory. However, the user can carry out CO² calibration manually when needed. The general recommendation is to calibrate once a year, but more often if it is used in dusty environments. During the manual calibration, the device must be exposed to fresh outdoor air. Keep a distance of at least one meter from the device during the calibration process – no humans, animals, or plants should be closer to the device during calibration.	

### 08 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.



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 support@inkbird.com. We will do our best to help you.

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