Inkbird IAQM-129-W

INKBIRD Air Quality Monitor User Manual

Model: IAQM-129-W

Introduction

The INKBIRD IAQM-129-W is a portable 10-in-1 air quality monitor designed for indoor environments. It provides real-time monitoring of various air quality indicators, including CO2, HCHO (formaldehyde), TVOC (Total Volatile Organic Compounds), AQI (Air Quality Index), PM2.5, PM10, temperature, and humidity. Equipped with Wi-Fi connectivity, it allows for remote monitoring and data storage via the INKBIRD APP, helping you maintain a healthy living or working space.



Figure 1: INKBIRD IAQM-129-W Air Quality Monitor with companion app.

Product Features

- **10-in-1 Real-time Monitoring:** Integrates measurement functions for CO2, HCHO, TVOC, AQI, PM2.5, PM10, Temperature, Humidity, Time, and Date.
- **Wi-Fi Enabled & Data Storage:** Compatible with 2.4 GHz Wi-Fi for remote monitoring via the INKBIRD APP. Supports two-year data storage and export.
- **Customizable Alarm Values:** Set warning thresholds for CO2, PM2.5, and AQI with dual light and sound alarms.
- **Large HD Screen:** 6.1-inch display with clear, color-coded data and comfort indicators for easy readability.
- **User-Friendly Options:** Switch between 12/24 hour format and °F/°C units. Adjustable screen brightness, ECO mode, and multiple placement options (tabletop, wall-mounted).
- **ECO Mode:** Extends battery life to 10 hours (vs. 7 hours in standard mode) by putting some sensors to sleep during inactivity. Recommended to use with charging cable plugged in for continuous monitoring.



Figure 2: Overview of the 10-in-1 monitoring capabilities.

Product Layout and Components

Familiarize yourself with the device's buttons and ports for optimal use.

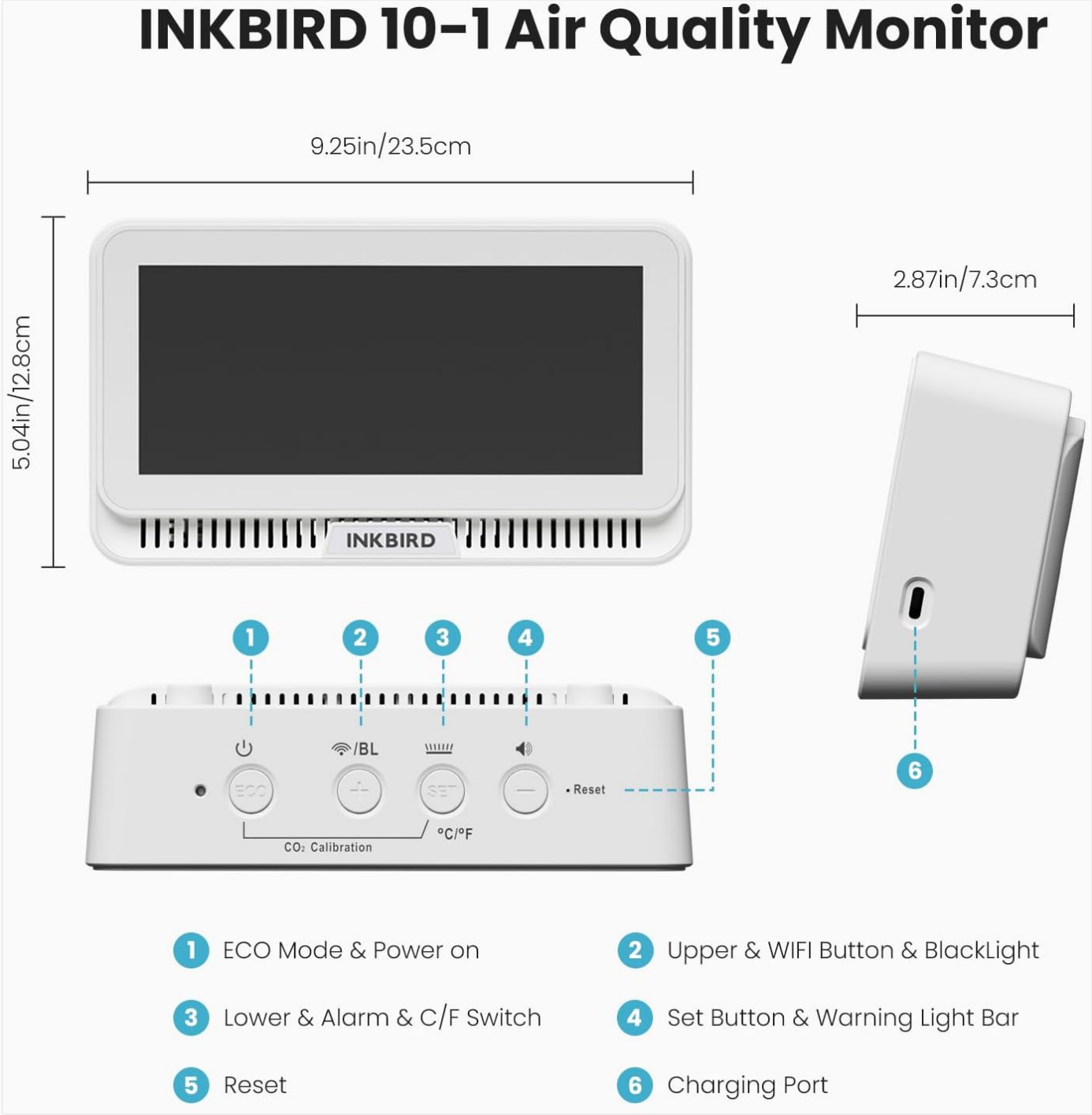


Figure 3: Top and side view of the monitor with labeled components.

Table 1: Component Descriptions

No.	Component	Function
1	ECO Mode & Power On Button	Press to toggle ECO mode. Press and hold for 2 seconds to power on/off.
2	Upper & WiFi Button & Backlight	Used for navigation/adjustment. Press and hold for 2 seconds to turn Wi-Fi function on/off. Short press to adjust backlight.
3	Lower & Alarm & C/F Switch	Used for navigation/adjustment. Press and hold to turn audible alarm on/off. Short press to switch temperature unit (°C/°F).
4	Set Button & Warning Light Bar	Double press to enter alarm setting. Press and hold for 2 seconds to turn AQI alarm light on/off.

No.	Component	Function
5	Reset Button	Press to reset the device.
6	Charging Port	USB-C port for charging the device.

Setup

Power On/Off

To power on the device, press and hold the **ECO Mode & Power On** button (1) for 2 seconds. The display will light up. To power off, press and hold the same button for 2 seconds.

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Video 1: Demonstrates powering the device on and off. (Source: LERWAY Tech.)

Setting Time & Date

1. Double press the **Set** button (4) to enter the time setting.
2. Press the **Upper** (2) or **Lower** (3) button to set the month, then press the **Set** button (4) to confirm.
3. Press the **Upper** (2) or **Lower** (3) button to set the day, then press the **Set** button (4) to confirm.
4. Press the **Upper** (2) or **Lower** (3) button to set the hour, then press the **Set** button (4) to confirm.
5. Press the **Upper** (2) or **Lower** (3) button to set the minute, then press the **Set** button (4) to confirm.

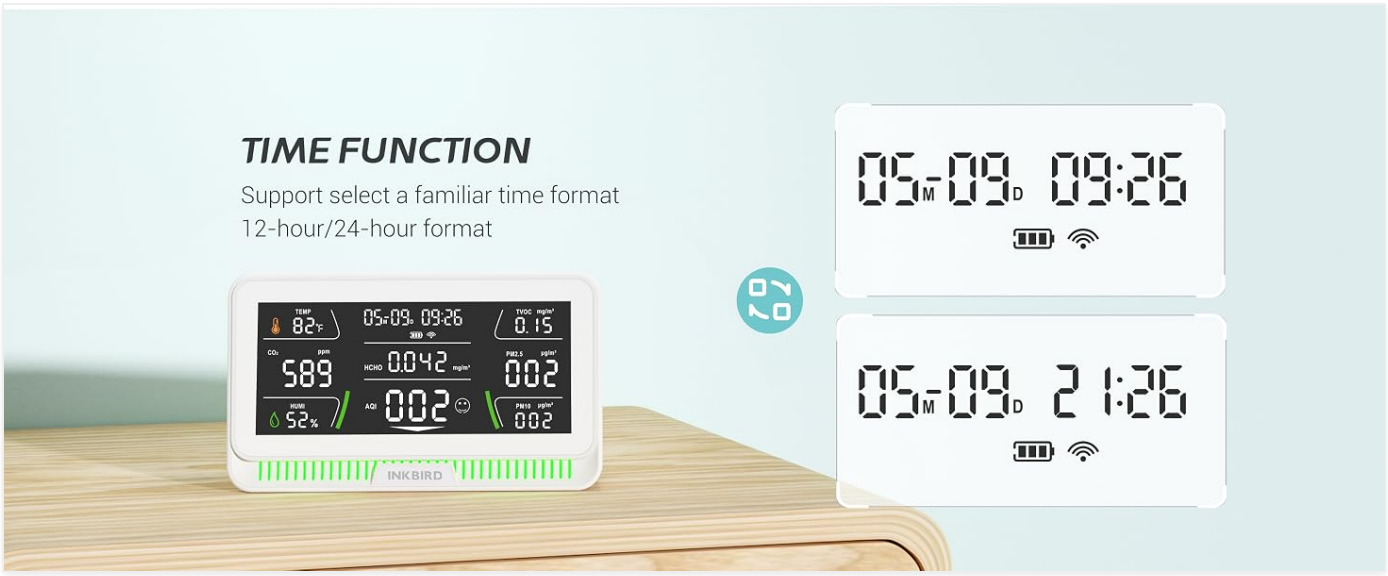


Figure 4: Step-by-step guide for setting the time and date.

CO2 Auto Calibration

For accurate CO2 readings, perform auto-calibration in a well-ventilated area, preferably outdoors. Ensure no one is close to the device during calibration to avoid affecting results.

1. Power off the device.
2. Press and hold both the **ECO Mode & Power On** button (1) and the **Set** button (4) simultaneously.
3. Hold for 200 seconds until the calibration process is complete. The display will show a countdown.

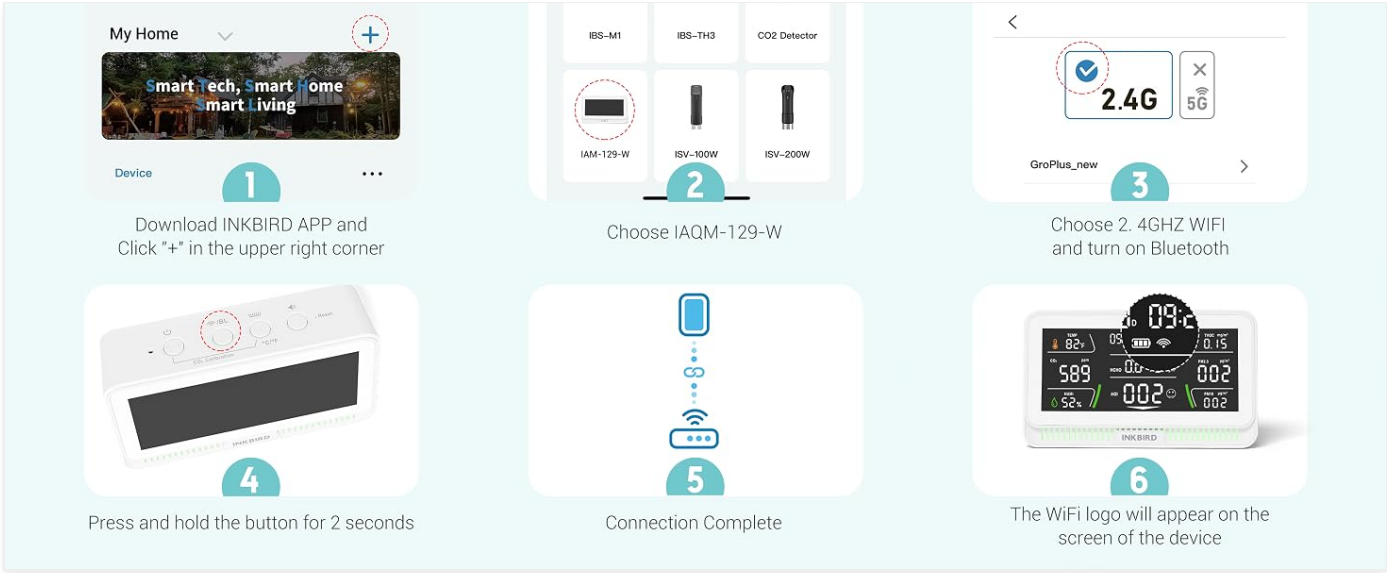


Figure 5: Instructions for CO2 auto calibration.

Wi-Fi Connectivity

The device supports 2.4 GHz Wi-Fi for app connectivity. Ensure your smartphone's Bluetooth is enabled during the initial setup.

1. Download the INKBIRD APP from your app store.
2. Open the app and click "+" in the upper right corner to add a device.
3. Select "IAQM-129-W" from the device list.
4. On the device, press and hold the **Upper & WiFi Button** (2) for 2 seconds to turn on the Wi-Fi function. The Wi-Fi logo will appear on the screen.
5. Follow the in-app instructions to complete the connection.



Figure 6: Guide to Wi-Fi setup and app connection.

Operating Instructions

Understanding the Display

The 6.1-inch HD screen displays various air quality parameters. Comfort indicators (green, yellow, red) and emoticons provide a quick visual assessment of the air quality status.



Figure 7: Detailed view of comfort level indicators on the display.

Customizing Alarm Values

You can set custom warning thresholds for CO2, PM2.5, and AQI. When a value exceeds the set threshold, the device will activate a dual alarm (light and sound).

1. Double press the **Set** button (4) to enter the alarm setting.
2. Press the **Upper** (2) or **Lower** (3) button to set the AQI alarm value, then press the **Set** button (4) to confirm.
3. Press the **Upper** (2) or **Lower** (3) button to set the CO2 alarm value, then press the **Set** button (4) to confirm.
4. Press the **Upper** (2) or **Lower** (3) button to set the PM2.5 alarm value, then press the **Set** button (4) to confirm.
5. To turn the audible alarm on or off, press and hold the **Lower** button (3).
6. To turn the AQI alarm light on or off, press and hold the **Set** button (4) for 2 seconds.

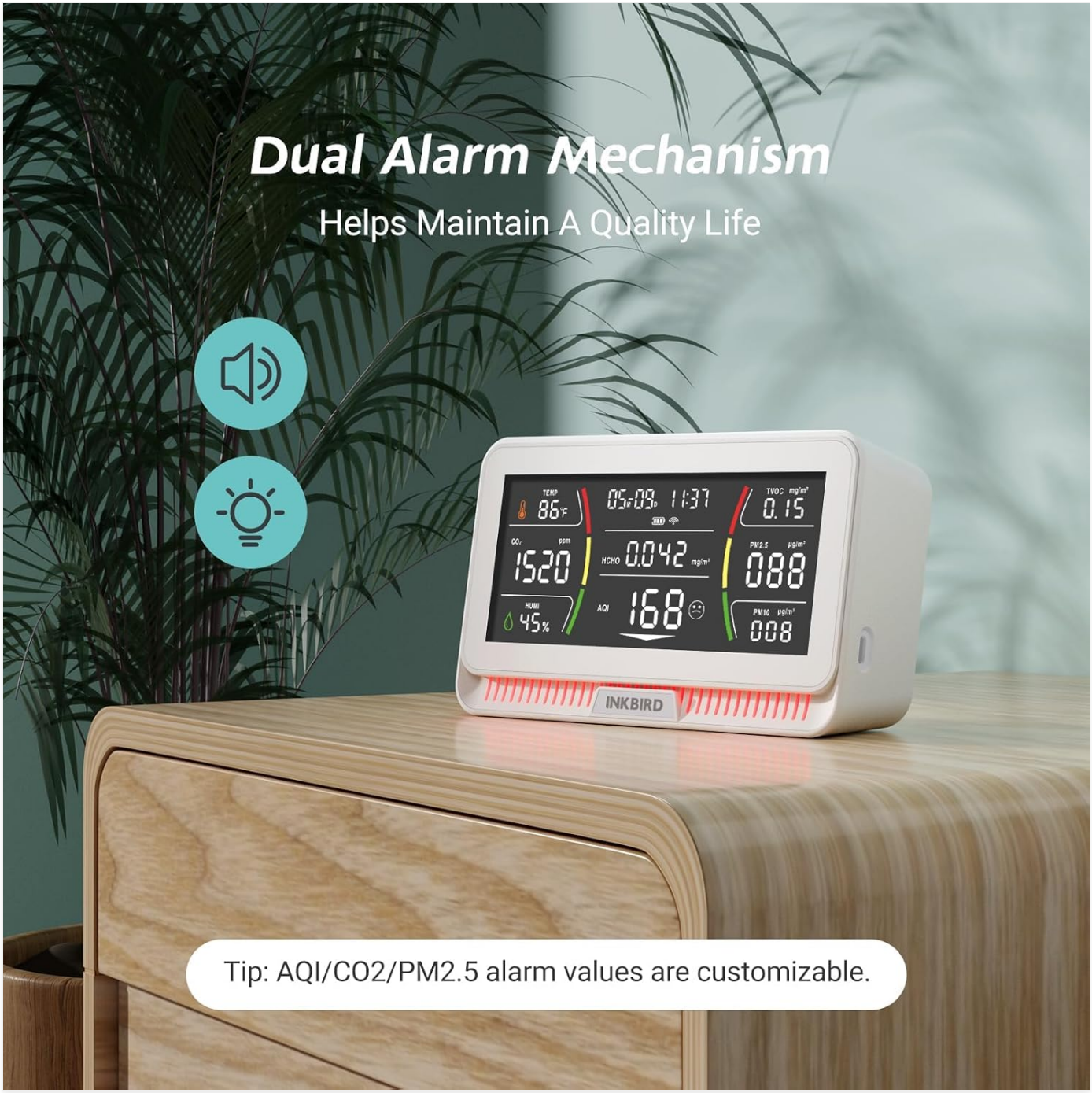


Figure 8: Setting custom alarm values and managing alarms.

Adjusting Screen Brightness

The screen brightness can be manually adjusted to suit ambient lighting conditions. Short press the**Upper & WiFi Button** (2) to cycle through brightness levels.

ECO Mode

ECO mode conserves battery by putting some sensors into sleep mode during inactivity. This extends battery life to 10 hours compared to 7 hours in standard mode. In ECO mode, sensors detect once every 15 minutes after 5 minutes of inactivity, and once every hour after 1 hour of inactivity. It is recommended to use the device with the charging cable plugged in for continuous, real-time monitoring.
To toggle ECO mode on or off, press the**ECO Mode & Power On** button (1).

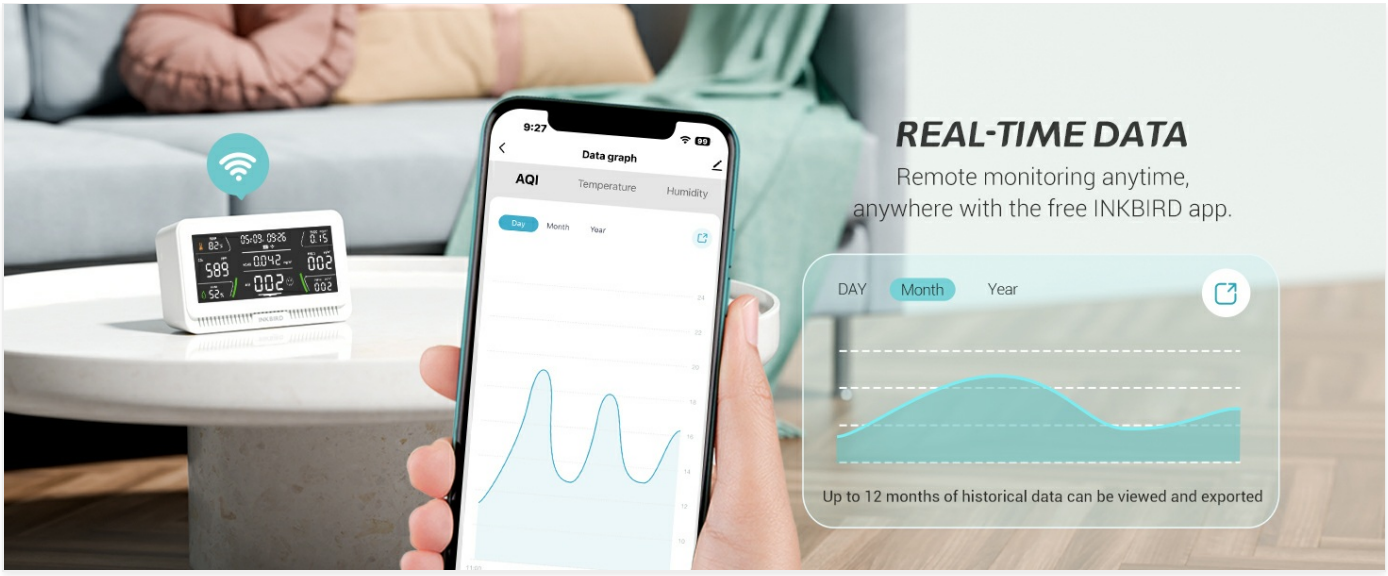


Figure 9: Information on ECO mode and charging.

Temperature Unit Conversion

You can switch the temperature display between Fahrenheit (°F) and Celsius (°C).
Short press the **Lower & Alarm & C/F Switch** button (3) once to switch the temperature unit.



Figure 10: Switching temperature units.

Real-time Data and App Features

The INKBIRD APP allows for remote monitoring of various air indicators anytime, anywhere. It supports two-year data storage and export, enabling you to view historical data and trends.



Figure 11: Real-time data monitoring and historical data via the INKBIRD app.

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Video 2: Overview of the IAQM-129 Air Quality Monitor features and app integration. (Source: LERWAY Tech.)

Maintenance

- Keep the device clean by wiping it with a soft, dry cloth. Avoid using abrasive cleaners or solvents.
- Ensure the ventilation holes are not obstructed to allow for accurate readings.
- Store the device in a cool, dry place when not in use for extended periods.
- Regularly check for firmware updates via the INKBIRD APP to ensure optimal performance and new features.

Troubleshooting

Table 2: Common Issues and Solutions

Problem	Possible Cause	Solution
Device not powering on.	Low battery or power cable issue.	Connect the device to a USB-C power source. Ensure the cable is securely connected.
Inaccurate CO2 readings.	Needs calibration or poor ventilation.	Perform CO2 auto-calibration in a fresh air environment. Ensure proper ventilation in the monitoring area.
Wi-Fi connection issues.	Incorrect Wi-Fi password, 5GHz network, or device too far from router.	Ensure you are connecting to a 2.4 GHz Wi-Fi network. Verify the password. Move the device closer to the Wi-Fi router. Reset Wi-Fi connection by holding the Wi-Fi button.
Alarm not sounding/light not flashing.	Alarm disabled or threshold not met.	Check alarm settings and ensure audible alarm and light are enabled. Adjust thresholds if necessary.
Display is dim or difficult to read.	Brightness setting is low.	Adjust screen brightness using the **Upper & WiFi Button** (2).

Specifications

- **Model:** IAQM-129-W
- **Brand:** Inkbird
- **Color:** White
- **Monitoring Parameters:** CO2, HCHO, TVOC, AQI, PM2.5, PM10, Temperature, Humidity, Time, Date
- **CO2 Sensor:** NDIR (Non-dispersive infrared)
- **Temperature Accuracy:** ±0.5°C / ±0.9°F
- **Operating Humidity:** 10-90% RH
- **Battery:** Built-in 2700mAh Li-Po Battery
- **Battery Life:** Approx. 7 hours (Standard Mode), 10 hours (ECO Mode)
- **Charging Port:** USB-C (cable included, charger not included)
- **Connectivity:** 2.4 GHz Wi-Fi
- **Mounting Type:** Tabletop, Wall Mount
- **Item Weight:** 11.3 ounces (approx. 320g)
- **Package Dimensions:** 9.02 x 5.04 x 2.91 inches (approx. 22.9 x 12.8 x 7.4 cm)
- **Country of Origin:** China

Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the official Inkbird website or contact their customer service directly. Keep your purchase receipt for warranty claims.
Manufacturer: INKBIRD

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