

Model: EGVOC-80 (Style: Air Quality Monitor w/ PM2.5, TVOC, HCHO, Temp/Humid)

## **1. Overview**

The EG Air Quality Monitor is a portable device designed to measure and display multiple indoor air quality parameters. It is intended for spot-checking or continuous monitoring in environments such as homes, offices, cars, and hotel rooms.

The device incorporates a built-in fan and multiple sensors to provide real-time readings on a color LCD screen.





## 2. Features and Specifications

### 2.1. Measurement Capabilities

- **Formaldehyde (HCHO):** Concentration range of 0 to 1.999 mg/m<sup>3</sup>.
- **Total Volatile Organic Compounds (TVOC):** Concentration range of 0 to 9.999 mg/m<sup>3</sup>.
- **Particulate Matter (PM):** Measures PM1.0, PM2.5, and PM10 levels from 0 to 999 µg/m<sup>3</sup>.
- **Temperature:** Displays in Celsius (°C) or Fahrenheit (°F).
- **Relative Humidity:** Displays as a percentage.

## 2.2. Physical Specifications

<b>Display</b>	2.8-inch color LCD, 320 x 240 pixels
<b>Power Source</b>	DC 5V Micro USB charging port / 1000 mAh Lithium battery
<b>Battery Runtime</b>	Approximately 2-3 hours on battery power
<b>Dimensions</b>	155 x 87 x 35 mm (6.1" H x 3.43" W x 1.38" D)
<b>Weight</b>	150 g (0.31 kg)
<b>Alarm</b>	Audible alarm function
<b>Sensor Type</b>	Laser sensor for PM; Electrochemical semiconductor sensor for HCHO/TVOC
<b>Color</b>	White

## 2.3. Key Components

- **Built-in Fan:** Draws ambient air into the device for real-time measurement.
- **Built-in Stand:** Allows the device to be placed on a flat surface.
- **Auto-Calibration:** Device auto-calibrates in fresh air.

## 3. Use Guide

### 3.1. Initial Setup and Power

1. Fully charge the device using the provided DC 5V Micro USB cable before first use.
2. Power the device on. The LCD screen will illuminate.
3. For initial use or if persistent 0.000 readings are observed indoors, calibrate the device by placing it in fresh outdoor air for a period of time to allow auto-calibration.

### 3.2. Taking Measurements

- Place the monitor in the area you wish to test, using the built-in stand or laying it flat. Ensure the air intake is unobstructed.
- The built-in fan will activate, drawing air over the sensors.
- Allow several minutes for readings to stabilize, especially for HCHO and TVOC levels.
- Observe all parameters on the color LCD display.

**Note on TVOC Readings:** Large variations and readings of 9.999 do not necessarily indicate an error. The device is sensitive and high TVOC readings can result from interference from common benign sources like fragrances or cleaning products.

### 3.3. Understanding the Display

The 2.8-inch color LCD simultaneously shows numerical values for:

- HCHO (Formaldehyde)
- TVOC (Total Volatile Organic Compounds)
- PM2.5, PM10, PM1.0 (Particulate Matter)
- Temperature
- Relative Humidity

**Note on PM2.5:** The device displays PM2.5 concentration in  $\mu\text{g}/\text{m}^3$ , not the Air Quality Index (AQI). You can use an online AQI calculator (e.g., AirNow) for conversion.

### 3.4. Portable and Continuous Monitoring

- The device can be used for spot checks or left on for continuous monitoring.
- The lithium battery provides portable operation when not connected to USB power.
- Use continuous monitoring to track changes in air quality over time, such as after opening windows or running an air purifier.

## 4. Safety and Maintenance

### 4.1. Safety Information

- This device is an air quality **monitor and tester**. It is not a life-safety alarm device.
- It does not detect carbon monoxide (CO) or smoke.
- For situations requiring life-safety alarms (e.g., fire, CO), use products listed and approved for those specific purposes.
- The audible alarm on this device is for general air quality alerts based on its measurements.

### 4.2. Care and Maintenance

- Keep the device and its air intake vents clean and free from dust and debris.
- Store in a cool, dry place when not in use.
- Recharge the battery periodically if the device will be stored for an extended time.
- Avoid exposing the device to extreme temperatures, high humidity, or direct sunlight for prolonged periods.

## 5. Troubleshooting

Issue	Possible Cause / Solution
Device does not power on	Battery may be depleted. Connect to a DC 5V USB power source to charge.
Readings show 0.000 for HCHO/TVOC indoors	Device may require calibration. Place in fresh outdoor air for auto-calibration.
TVOC reading is 9.999	This may be a valid high reading or interference from odors/fragrances. Ventilate the area and retest.
Readings seem inaccurate or unstable	Ensure the device has been on and sampling air for several minutes to stabilize. Ensure the air intake is not blocked.
Battery drains quickly	The built-in fan consumes power. For extended use, keep the device connected to USB power.

## 6. Support

This product includes a 20+ page eBook on Gas and Air Quality Hazards, which will be emailed at the time of delivery.

For technical questions, the manufacturer (EG) provides USA-based support staff, including a chemist.

**Contact:** Support is provided by the manufacturer, EG. Please refer to any contact information provided in the packaging or documentation included with your purchase.

### Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.