



# User Manual



## Huma-i Black (HI-150)

Portable Air Quality Monitor, which measures  
CO<sub>2</sub>, VOC, Fine dust (PM2.5, PM10, PM1.0)  
Temperature and Humidity with high accuracy

## Introduction – Huma-i black (HI-150)

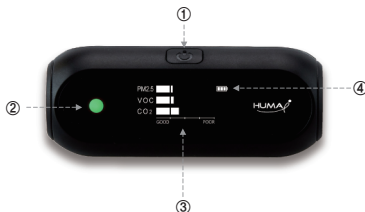
Thank you for purchasing our products.

Huma-i black is a portable air quality monitor, which measures CO<sub>2</sub>, VOC, PM2.5, PM10, Temperature and Humidity.

Its excellent portability will help you measure air quality in real time anytime & anywhere.

You can carry it with you anytime & anywhere for the peace of mind you deserve.

## Main functions



## ① **Power and mode selection button**

### - **Power Button**

If you press the button for 1 second, it will be in power-on state. It automatically switches to power-off state when not in use for 10 minutes to protect battery life.

The status LED will blink 1 minute before automatic power-off. At this time, if you press the button lightly, it will be switched on again for 10 minutes, and the mode will not change.

### - **Mode Selection Button**

Each time you press the mode select button, the display mode changes cyclically in the following order.

iAQI mode => Integrated Display Mode (PM2.5 / VOC / CO<sub>2</sub>) => WHO Mode => PM Mode (PM2.5 / PM10) => VOC Mode => CO<sub>2</sub> Mode => Temperature/Humidity Mode

## ② **Status Light**

The status LED lets you know the status of CO<sub>2</sub>, VOC, PM2.5 and PM10.



Unit of measurement		Good	Moderate	Poor	Unhealthy
$\mu\text{g}/\text{m}^3$	PM2.5	0~15	16~25	26~35	36~
	PM10	0~30	31~50	51~70	71~
ppm	VOC	0.000 ~ 0.220	0.221 ~ 0.660	0.661 ~ 2.200	2.201 ~ 10.000
ppm	CO <sub>2</sub>	<b>GOOD</b> (400 ~ 700)	<b>MODERATE</b> (701 ~ 1,000)	<b>POOR</b> (1,001 ~ 2,000)	<b>UNHEALTHY</b> (2,001 ~ 10,000)

## ① Display mode

### 1) iAQI mode (indoor AQI)

It displays indoor AQI figure together with ICON.  
The status LED color changes according to iAQI level

- blue, green, yellow and red.

\*\*\* iAQI is Huma-i's own indoor air quality index for VOC, CO<sub>2</sub>, PM2.5 and PM10.

It's for indoor use. Thus, it may differ from outdoor AQI.



**Good\_iAQI**



**Moderate\_iAQI**



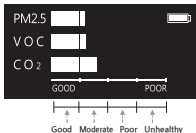
**Poor\_iAQI**



**Unhealthy\_iAQI**

## 2) Integrated display mode

It is shown in a step-by-step graph so that air quality can be judged easier than difficult figures.



PM2.5, VOC and CO<sub>2</sub> can be viewed in one screen.

Graph with 4 steps shows the air quality - good, moderate, poor and unhealthy

## 3) WHO mode (Icon mode)

You can easily recognize the good and poor state of find dust by 4 kinds of icons.

In this mode, it automatically displays the worst between PM2.5 and PM10.



**Blue : Good** air quality.



**Green : Moderate** air quality.



**Yellow : Poor** air quality.



**Red : Unhealthy** air quality.

#### **4) PM (Particulate Matter) display mode**

Simultaneously displays PM2.5 and PM10 measurement values.

#### **5) VOC (Volatile Organic Compound) display mode**

VOC concentration is displayed together with the ppm unit figures.

#### **6) CO<sub>2</sub> display mode**

CO<sub>2</sub> concentration is displayed in graph form.

The CO<sub>2</sub> sensor applied to our product is CO<sub>2</sub>eq (CO<sub>2</sub> equivalent), which is calculated based on the H<sub>2</sub> concentration that occurs when breathing in the fasting state.

It may react to other harmful gases in the surrounding environment.

If it shows a poor/unhealthy condition, use it as a ventilation guideline for indoor air management.

\*\*\*\* In case of CO<sub>2</sub> and VOC, the value is displayed after 15 ~ 60 seconds at power-on, after which the value is updated in every second.

#### **7) Temperature/Humidity mode**

It shows temperature and humidity in one screen.

\*\*\* In case of temperature and humidity, the temperature/humidity sensor is inside of the product and may cause a deviation of 5 ~ 10%.

**④ Battery Status Display: This icon displays remaining battery status.**

## Specifications

Product	Portable Air Quality Monitor
Model No	HI-150
VOC	0.000 ~ 10.000ppm
CO <sub>2</sub>	400 ~ 10,000ppm
PM2.5 & PM10	0 ~ 500 $\mu$ g/m <sup>3</sup>
Power Supply	Li-Polymer Battery
Charge Mode	USB micro 5 Pin
Operating Temperature	0 ~ 40°C (32 ~ 104°F)
Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
Dimension	91 X 41 X 37mm (3.6 X 1.6 X 1.5 inches)
Weight	60g (0.13 pound)
Certifications	CE FCC KC

## Limited Warranty

1. This device is a product that measures in real time while carrying when air quality measurement is needed.  
The OLED display has good visibility, but if it is turned on continuously, a burn-in phenomenon may occur, so it is not recommended to use it continuously unless it is absolutely necessary.
2. Do not expose to direct sunlight or subject it to high temperature and high humidity.  
It may change appearance or cause malfunction.
3. Do not use for long periods in high concentration fine dust environment. Note that the measurement may not be smooth.
4. Do not disassemble the product if you're not an authorized engineer and/or a technician.  
The disassembled products without authorization are out of warranty in any case.
5. Do not allow drinks or water to enter the product.  
It may cause malfunction, electric shock or fire.
6. This product may cause errors depending on the environment (temperature, humidity, wind) and usage.
7. The measured values of this product are for personal use only and are not responsible for the manufacturer and the seller.



MADE IN KOREA