ATO

Air Quality Monitor
Instruction Manual

Product Specifications

Display method: 2.8" LCD screen display,
320 x 240 pixels
Atmospheric pressure: 86Kpa - 106Kpa
Detection method for PM: Laser Scattering
Sampling time: 1.5 seconds
Product Size: 164 x 69 x 44 mm
Detection temperature: -10°C to 50°C; 14°F to 122°F
Relative humidity: 20% - 85%
Storage temperature: -10°C to 60°C; 14°F to 140°F
Concentration unit for PM (PM2.5/1.0/10) : ug/m3
Concentration unit for HCHO and TVOC: mg/m3
Power source: Lithium battery with 2000 mAh capacity; 5V DC power charging via micro USB port
Product weight: 179g

Product Description

This product is a multifunctional air quality detector that detects Formaldehyde (HCHO), Total Volatile Organic Compounds (TVOC), Particulate Matter <2.5 micron-sized particles (PM2.5/1.0/10), Temperature, and Humidity with clock and record function. As a scientific air quality detection device, it combines multiple air sensors with a built-in fan to allow real-time monitoring of formaldehyde (HCHO), total volatile organic compounds (TVOC), PM2.5/1.0/10, temperature, and humidity on its digital LCD display.

Considerations

Please read the instructions carefully before using this device.
Please keep the manual handy for quick reference and troubleshooting.

Precautions

Avoid covering the air intake areas during use to avoid inaccurate measurements.
Avoid use of solvents to clean the product as residual fumes will skew air quality readings.
Avoid water or other liquids near the product to avoid electrical damage.
Do not allow unauthorized modification or repair of this product.

Features

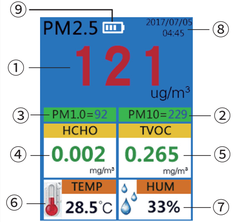
-2.8" color liquid crystal display (LCD), 320x240 pixels
-Test variables: PM2.5/1.0/10, formaldehyde, TVOC, temperature, humidity
-Large 2000mAh capacity Lithium battery
-On-board fan to draw in ambient air for more accurate real-time results
-5V Micro USB charging
-Low battery warning

01. Up button: used to increase value
02. Down button: used to decrease value
03. Exit / ESC button, used to exit from menus
04. SET button:use to enter the setup mode and navigate within menus
05.Power/Switch Button:used to confirm highlighted options or to turn device on/off by pressing for 3 seconds or to scroll between interfaces
06. Air convection hole
07. LCD display screen
08. USB charging port

HCHO (formaldehyde) ideal range: ≤0.10 mg/m3 (0.08 ppm/m3)
TVOC ideal range: ≤ 0.6 mg/m3 (0.45 ppm/m3)
The formaldehyde alarm threshold is 0.1 mg/m3. If levels of HCHO exceed this alarm threshold, the device will alarm with short beeps.

Instructions

(1)Start Up
When you press the center power button, the air quality monitor will boot up. Detector will proceed through its warm-up sequence for about 3 minutes to allow sensors to preheat and fan to draw in fresh ambient air. This is necessary for accurate results.



1.PM2.5 display area, showing the current PM2. 5 level.
2.PM10 display area, Showing the current PM10 level.
3.PM1.0 display area, showing the current PM1.0 level.
4.Formaldehyde display area, showing the current Formaldehyde level.
5.TVOC display area, showing the current Total Volatile Organic Compound level.
6.Temperature display area, showing the current temperature level
7.Humidity display area, showing the current humidity level.
8.Date and time display area
9.Battery symbol, showing the battery or charging indicator.

(2) Switching Among Data Display Formats (Figure 1-2)
Press the center power button to switch among data display formats (figures 1-2) that displays air quality readings in various formats

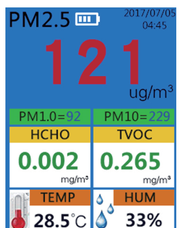


Figure 1

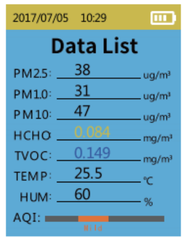


Figure 2

(3) System Settings (Figure 3-4)
Press the SET button to enter the setup interface, then Press the SET button again to select the content which you want to set, press the Power Button to confirm the option (the word color is turning red).Change the value using up/down buttons and confirm each change by pressing center power button, YES by pressing the center power botton, NO by ESC button.

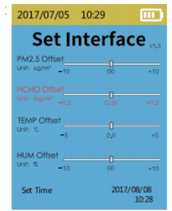


Figure 3

Figure 4

(4) About Charging
When low battery icon is displayed, the device needs to be charged. Insert the included or another compatible micro USB charging cable into the device. Attach the other end to a USB DC charger (such as a smartphone charger) that outputs DC 5V at >=1000mA. Fully charge for at least 2-3 hours before use. Avoid charging with a USB computer port which only outputs 500mA.

(5) Technical Parameter

-PM2.5/PM1.0 /PM10 detection
Detection principle: Laser scattering principle
Number of test particles: 2.5um, 1.0um, 10um
Detection method: concentration (per liter)
Detection range: 0-999ug /m³

-Formaldehyde detection
Detection range: 0-1.999mg /m³
Detection Technology: Semiconductor sensor
Adopt Method: diffuse collection
Concentration unit: mg /m³

-TVOC detection
Detection range: 0.000-9.999ma / m³
Detection Technology: Semiconductor
Sensing Technology Sampling technology: diffusion collection
Concentration unit: mg/m³

-Temperature and humidity technical indicators
Measuring range: 0-50 ° C
Humidity range: 20%-85% RH
Measurement accuracy: ±1 °C
Measurement accuracy: ±4% RH

(6) Standard Parameter

1)Standard formaldehyde (HCHO) : 0.100mg/m3
Less than 0.100:safety range
0.101-0.200:Light pollution
0.201-0.300:Moderate pollution
0.301 or more:heavy pollution

2)Standard for total volatile organic compounds (TVOC) : 0.600mg/m3
Less than 0.600: safety range
Achieve 0.601 or more: Exceeding the standard can cause respiratory system Abnormal, inflamed, cancerous, etc.

3)Standard particulate matte(PM2.5) :

Air quality grade	24 hours PM2.5 average value (standard)
Good	0-12
Medium	13-35
Unhealthy for sensitive groups	36-55
Unhealthy	56-150
Very unhealthy	151-250
Hazardous	251-999

4)Grade of Air Quality Index (AQI)
Very Good：0-35
Fine： 36-115
Slight： 116-150
Serious： 151-250
Danger： 251-500

Product List

Air Quality monitor x 1
Micro USB charging cable x 1
Product Manual x 1