

# Factors Affecting Air Quality



PM2.5 (Particulate Matter 2.5) refers to fine particles with diameter of 2.5 micrometers or less. Due to its tiny size, PM2.5 can be absorbed into bloodstream and the lungs, which may cause eye and nose irritation, cough, asthma, emphysema, lung disease, heart attacks, cancer and etc.



formula CH2O, which has been classified by IARC as Group 1 carcinogen. Long-term exposure to just low doses could cause chronic respiratory diseases, nasopharyngeal carcinoma, colon cancer, brain tumors, nuclear gene mutation and etc.

Formaldehyde (HCHO) is a colorless and strong-smelling gas with



TVOC (Total Volatile Organic Compounds) refers to various common VOCs including benzene, toluene, styrene, formaldehyde and etc. Due to their volatility as well as toxicity, irritability and carcinogenicity, long-term exposure to TVOCs can cause damage to the skin, liver, kidneys,central nervous system and etc.

is, using a range from 0 to 500, where higher index values indicate higher levels of air pollution and higher risks to health. There are six pollutants for AQI in US standard: PM2.5/10, O3, SO2, NO2, CO, where Temtop only focus on PM2.5/10 and follows the US EPA Standards to compute AOI. 1

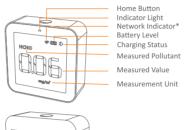
- $\bigstar$  Do not place the detector in heavily polluted environment for a long time. Otherwise, the sensor may be damaged and cannot run normally.
- $\bigstar$  Do not use the detector in humid environment in order to maintain the
- ★ Do not cover the air inlet/outlet while in use.
- Do not let fluff or hair entering the detector.
- ★ Try to avoid using the product in the environment with strong odour or pungent smell.

# **Product Overview**

3. Indicator Lights

Status

Color





\* Only M10i has this symbol.

Green

## Functions

Function Model	P10	M10	M10i
PM2.5	<b>/</b>	<b>✓</b>	~
AQI*	<b>/</b>	<b>✓</b>	<b>~</b>
HCHO		<b>✓</b>	
TVOC		<b>✓</b>	~
Wi-Fi			<b>/</b>

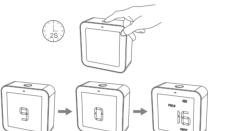
Specifications		
Model: P10/M10/M10i	PM2.5	
Battery capacity: 2200mAh	Sensor: Laser PM sensor Measuring range: 0-999μg/m³ Resolution: 1μg/m³ Accuracy: ±10μg/m²(0-100μg/m³); ±10%μg/m²(100-500μg/m²)	
Battery life: Approx. 6 hours on a single charge		
Input: DC 5V; 0.5A-1A		
Operating environment: 0-50°C;0-90%RH		
Dimensions: 82x82x31 mm	HCHO*	
3.2x3.2x1.2 in.	Sensor : Electrochemical sensor Measuring range: 0-2mg/m³ Resolution: 0.01mg/m³ Accuracy: ±0.03mg/m¹(0-0.3mg/m²); ±10%mg/m²(0.3-2mg/m²)	
Weight: 200g		
TVOC Measuring range*: 0-5mg/m³		
TVOC Resolution: 0.01mg/m³		
4	* The function is for M10/M10i only.	

Before you begin Unpack and take out the detector.

Place it outdoors for more than 6 hours for calibrations.

## 1.Turn On/Off

Press and hold Home button for 2 seconds to turn on/off the detector. After turn on, please wait for the countdowns.





HCHO concentration will auto display after the co

Then press Home Button to display PM2.5 co

mg/m<sup>a</sup>



Elitech Technology, Inc. 1551 McCarthy Blvd, Suite 112,

Milpitas, CA 95035 USA (+1)408-844-4070 sales@temtopus.com www.temtopus.com Made in China

Then press Home Button to display TVOC concentration; Then press Home Button again to display AQI index:





Manual Loop: Repeat above steps can manually loop the display in order of HCHO, PM2.5, TVOC, AQI.

Auto Loop : Double press Home Button can auto loop each display every 3s. Double press again to exit Auto Loop mode.

 $mg/m^3$ 

Note: For further Wi-Fi connecting instructions to M10i model, please refers to another manual that comes along: "M10i Add Device and Connect Wi-Fi".



PM2.5 concentration will auto display after turn on countdowns Then press Home Button to display AQI index:

Manual Loop: Repeat above steps can manually loop and display

Auto Loop: Double press Home Button can auto loop each display

8

every 3s. Double press again to exit Auto Loop mode.



the PM2.5, AQI.







4. Charging When battery level is low, please charge by connecting it with the USB cable



The indicator lights on the panel indicate the corresponsing air quality:

Status Good Fair Poor

Color Green Yellow Red

The battery level indicator on the screen indicates the device charging status:

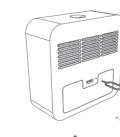
Yellow

Charging

It is suggested to calibrate the detector after 3 months usages. The calibration instructions are showing below:

a) Turn on the detector and wait for about 10 minutes. b) Use the pin tool to press the calibration button for more than 10 seconds until HCHO icon blinks on the screen.

c) Place the detector outside for 10 minutes for ventilation. d) When HCHO icon does not blink, it indicates that the calibration has  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 



# **Air Quality Parameter for Reference**

Stat Pollutant	Good	Fair	Poor
PM2.5 ( μg/m³	) ≤12	12.1~55.4	≥ 55.5
AQI*	≤50	51~150	≥151

1

Status Pollutant	Healthy	Unhealthy
TVOC (mg/m³)	≤0.5	>0.5
HCHO (mg/m³)	≤0.1	>0.1

# What's Included

2. Display

1 M10/M10i Model

Air Quality Detector x 1 P10/M10/M10i Manual x 1 USB Cable x 1 Pin Tool\* x 1 M10i Add Device and Connect Wi-Fi Manual\*\* x 1

> \* Only included for M10 and M10i \*\* Only included for M10i

