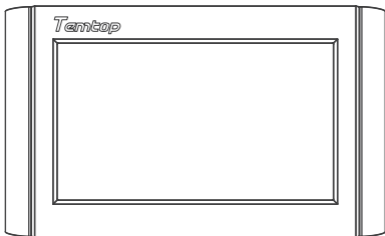# Temtop

P1000/M1000

Product Overview

P1000 and M1000 are designed to detect the air quality. Adopting the high-precision electrochemical formaldehyde sensor, laser particle sensor and carbon dioxide sensor based on NDIR, it can directly transform the concentration of pollutants in the air into visual data and provide air quality for you to effectively safeguard the health of your family.

Application Scope

Indoors, Outdoors, Vehicles, etc.

Product Appearance

Product Specifications

- Name: Air quality detector
- Display mode: LCD screen
- Battery voltage: 3.7VDC
- Overall dimension: 260*139*33mm
- Power adapter:
  Output : DC5V, 0.5-1A
- Battery life : 6-8h
- Operating environment:
  Temperature range: 0-50℃
  Humidity range: 0-90% RH
  Atmospheric pressure condition: 1atm
- Measurement index and range:
  Formaldehyde measurement technical index
  Range: 0-5mg/ m^3
  Resolution: 0.001mg/m^3
  TVOC measurement technical index
  Range: 0-9mg/ m^3
  Resolution: 0.001mg/m^3
  PM2.5 measurement technical index
  Range: 0-999ug/m^3
  Resolution: 0.1ug/m^3
  PM10 measurement technical index
  Range: 0-999ug/m^3
  Resolution: 0.1ug/m^3
  CO_2 measurement technical index
  Range: 0-5000ppm
  Resolution: 1ppm

Operation Method

1. Turn on/off the detector
Press and hold the power button for 2 seconds to turn on/off the detector.

2.Set the detection interval

In order to extend the service life of the product, it will enter the intermittent detection mode after 30 minutes of operation. In this mode, the sensor will work intermittently and the detection interval will be 5 to 30 minutes adjustable. When any key is pressed, the mode is automatically exited and held for 30 minutes. The detection setting method is as follows:

Short Press "SET" button to enter setting mode when instrument is on, the LCD interface display preset time interval, press "+" button, the interval time add 5 minutes; press "-" key, the interval time minus 5 minutes. Short press "SET" button again, the instrument will exit interval time setting mode and save the current settings.

3.Detection

When product is first powered on, self-test mode will start running first, when the screen number is added to "9" then will enter into the normal detection mode. CO_2 sensor requires 180 seconds warm-up time, after the initial access to normal detection mode, CO_2 index display position will display 180 seconds countdown, when the countdown is over, the screen will normally

display CO_2 concentration index of the environment. Turn on the detector and put it in the environment which needs testing, then the system will automatically detect the concentration of Formaldehyde, TVOC, PM2.5, PM10 .

4. Power indication

The detector has the function of testing the battery power. When the battery is low. Please charge.

Health Parameters Guide

HCHO (mg/m³)	TVOC (mg/m³)	Level
0-0.1	0-0.5	Healthy
>0.1	>0.5	Unhealthy

PM2.5 (ug/m³)	PM10 (ug/m³)	CO_2 (ppm)	Level
0.0-12.0	0-54	0-700	Good
12.1-35.4	55-154	701-1000	Moderate
35.5-55.4	155-254	1001-1500	Unhealthy for Sensitive Groups
55.5-150.4	255-354	1501-2500	Unhealthy
150.5-250.4	355-424	2501-5000	Very Unhealthy
≥250.5	≥425	≥5001	Hazardous

Operation Notice

● The sensor used to detect PM2.5, PM10 and particles adopts laser detection theory, so objects like battings and hair should be prevented from entering the detector to avoid influencing the accuracy of test data.

● Do not put the detector in the environment where the concentration of PM2.5 is more than 500ug/m³ , CO_2 is over 5000ppm and that of formaldehyde is over 1.0mg/m³ for long time. Long-time exposure to high-concentration air pollutants will damage the sensor and make it work improperly.

●Please put the detector in a ventilated environment for 6 hours when you use it for the first time to avoid the influence of micro interfering gas inside the package.

●Avoid using the detector in humid environment to make sure the accuracy of test data.

●Avoid bump, strike and drop.

●Do not cover the detection port and air outlet port when using the detector.

●Be cautious of cross interference.

Formaldehyde sensor adopts high-precision electro-chemical sensor. Due to its electrochemical reaction characteristic, the sensor may react to other gases besides the target gas. Please avoid using the detector in the environment containing the following gases to guarantee the accuracy of data.

Interference Gas	Relative Sensitivity (%)
Carbon monoxide (CO)	1
Hydrogen sulfide (H_2S)	/
Hydrogen (H_2)	0.1
Sulphur dioxide (SO_2)	12
Nitrogen dioxide (NO_2)	/
Nitric oxide (NO)	/
Chlorine (Cl)	-3
Ethylene (C_2H_4)	/
Ammonia (NH_3)	0
Carbon dioxide (CO_2)	0
Methanol, ethanol	50
Phenols	7

Fault Description

Display problem: please check the battery power. If it still cannot display, please contact the service center.

Data problem: Change the test environment and restart the detector. If the problem still cannot solved, please contact the service center.

Warranty Rule

Temtop warrants the included detector for 1 year from the date of original purchase. The item can be exchanged or returned within 30 days if the defect is not caused by artificial damage.

Item	Warranty Period
Detector	1 year included
Accessories	N/A

Before return or delivery for repair, please check if the following items are ready:

	Detector & Accessories	Complete Package	Proof of Purchase*	Gift (if any)
Return	√	√	√	√
Exchange	√	√	√	
Repair	√		√	

Including invoice, order number and etc.

Temtop warranty does NOT include:
- Malfunction or damages caused by artificial damage or modification.
- Other deliberate damages.
- Damages caused by force majeure.

Packing List

Main machine..1 Set
USB cable...1 Piece
User manual..1 Piece

Appendix

The product functionality of full series

Model	Functionality
P1000	PM2.5+PM10+CO_2+temperature + humidity
M1000	HCHO+PM2.5+TVOC+temperature + humidity