

Temtop LKC-1000S+

Temtop LKC-1000S+ Air Quality Detector Instruction Manual

Model: LKC-1000S+

Brand: Temtop

1. INTRODUCTION

The Temtop LKC-1000S+ is a versatile 10-in-1 air quality detector designed to monitor various environmental parameters. This device provides accurate measurements for PM2.5, PM10, particle count, HCHO (Formaldehyde), TVOC, AQI (Air Quality Index), temperature, and humidity. It features a clear TFT screen for easy readability, data export capabilities, and a histogram display for historical data. This manual will guide you through the proper use and maintenance of your LKC-1000S+ detector.

2. PRODUCT FEATURES

- **10-in-1 Monitoring:** Measures PM2.5, PM10, Particles, HCHO, TVOC, AQI, Temperature, and Humidity.
- **Advanced Sensor Technology:** Equipped with a 3rd generation Temtop laser particle sensor and optimized PSO algorithm for accurate and stable particle measurements, with a sensor life of up to 20,000 hours.
- **High-Precision Formaldehyde Detection:** Features a pre-calibrated electrochemical sensor for precise capture of formaldehyde molecules.
- **User-Friendly Display:** Large TFT screen with rich display options and a battery indicator light for clear readability.
- **Historical Data Analysis:** New histogram function displays concentration changes of tested objects over the past 12 hours.
- **Data Export:** Supports data export for detailed analysis and record-keeping.

Temtop

Your Experts in Air Quality

A 10-in-1 air quality detector

for all your quantitative air quality needs



Image: The Temtop LKC-1000S+ detector highlighting its 10-in-1 air quality monitoring functions, including PM2.5, PM10, Particles, HCHO, TVOC, AQI, Temperature, Humidity, and Data Export.

3. PACKAGE CONTENTS

Please verify that all items are present in the package:

- Temtop LKC-1000S+ Air Quality Monitor
- USB Charging Cable (Micro USB)
- Instruction Manual
- Storage Box

Temtop

Your Experts in Air Quality

Air Quality Monitor

Manual

Storage Box

USB Charging

*The dock is for display only and is not included in the package

Image: The Temtop LKC-1000S+ air quality monitor, its storage box, the instruction manual, and the USB charging cable.

4. DEVICE OVERVIEW

Familiarize yourself with the components and controls of your LKC-1000S+ detector:

Temtop

Your Experts in Air Quality

Single-click to get pollutant index




Tip: Double-click the HCHO or PM2.5 buttons to get the corresponding histogram.

Image: Labeled diagram of the Temtop LKC-1000S+ device, indicating the Air Outlet, Air Inlet, LCD Screen, AQI/Temp & Humi button, PM2.5/PM10/Particles button, HCHO/TVOC button, and USB Port.

- **Air Outlet:** Where processed air exits the device.
- **Air Inlet:** Where ambient air enters the device for sampling.
- **LCD Screen:** Displays all measurement readings and device status.
- **AQI / Temp & Humi Button:** Press to cycle through Air Quality Index, Temperature, and Humidity displays. Double-click for histogram.
- **PM2.5 / PM10 / Particles Button:** Press to cycle through PM2.5, PM10, and Particle count displays. Double-click for histogram.
- **HCHO / TVOC Button:** Press to cycle through Formaldehyde and TVOC displays. Double-click for histogram.
- **USB Port:** Micro USB port for charging and data export.

Efficiency at its finest

Dart 
electrochemical HCHO sensor



Sensirion 
temp & humi sensor



Temtop 
Laser PM2.5 Sensor (3rd Gen.)



Image: An exploded view illustrating the internal components of the Temtop LKC-1000S+, detailing the Dart electrochemical HCHO sensor, Sensirion temperature and humidity sensor, and the 3rd Generation Temtop Laser PM2.5 Sensor.

5. SETUP

- 1. Initial Charge:** Before first use, fully charge the device using the provided USB cable and a standard USB power adapter (not included). The battery indicator on the screen will show charging status.
- 2. Power On:** Press and hold the power button (usually located in the center of the control panel) for a few seconds until the screen illuminates.
- 3. Initial Calibration:** For optimal accuracy, allow the device to run for at least 5-10 minutes in a well-ventilated area after powering on, especially for HCHO and TVOC readings. This allows the sensors to stabilize.

6. OPERATION

6.1 Taking Readings

Once powered on, the device will automatically begin monitoring. The main screen displays real-time readings for various

parameters.

- Use the dedicated buttons (AQI / Temp & Humi, PM2.5 / PM10 / Particles, HCHO / TVOC) to switch between different measurement displays.
- The screen will show the current concentration or value for the selected parameter.

6.2 Understanding the Display

The large TFT screen provides clear information:

- **Running Status:** Indicates the device is actively monitoring.
- **Battery Indicator:** Shows remaining battery life.
- **Measurement Units:** Clearly displayed (e.g., ug/m³ for PM2.5/PM10, mg/m³ for HCHO/TVOC).
- **AQI Level:** Provides an overall air quality assessment (e.g., Good, Moderate, Unhealthy).

6.3 Histogram Function

To view the historical data histogram for a specific parameter:

- Double-click the corresponding button (AQI / Temp & Humi, PM2.5 / PM10 / Particles, or HCHO / TVOC).
- The screen will display a graph showing the concentration changes over the past 12 hours.

7. PARAMETER COMPARISON

The LKC-1000S+ offers a comprehensive set of monitoring capabilities compared to other models:

Model Comparison

	LKC-1000S+ 2nd	LKC-1000S+	LKC-1000E	P600
PM2.5	✓	✓	✓	✓
PM10	✓	✓	✓	✓
HCHO	✓	✓	✓	
Particle Count	✓	✓	✓	
AQI	✓	✓	✓	
TVOC	✓	✓		
TEMP&HUM	✓	✓		✓
Histogram	✓	✓		
Data Export	✓			

Image: A comparison table detailing the monitoring parameters available across different Temtop air quality monitor models, including PM2.5, PM10, HCHO, Particle Count, AQI, TVOC, Temperature & Humidity, Histogram, and Data Export.

Model Comparison

Parameter	LKC-1000S+	LKC-1000S	LKC-1000E	P600
PM2.5	✓	✓	✓	✓
PM10	✓	✓	✓	✓
HCHO	✓	✓		
Particle Count	✓	✓	✓	
AQI	✓	✓	✓	
TVOC	✓	✓		
Temp & Humi	✓	✓		✓
Histogram	✓	✓		
Data Export	✓			

8. AIR QUALITY INDEX INTERPRETATION

The device provides an Air Quality Index (AQI) and specific parameter levels based on EPA & WHO Air Quality Standards. Refer to the tables below for interpretation:

Parameter Comparison Table

*According to EPA & WHO Air Quality Standard

PM2.5	PM10	AQI*	Index
0-12	0-54	0-50	Good
12.1-35.4	55-154	51-100	Moderate
35.5-55.4	155-254	101-150	Unhealthy for Sensitive Groups
55.5-150.4	255-354	151-200	Unhealthy
150.5-250.4	355-424	201-300	Very Unhealthy
≥250.5	≥425	≥301	Hazardous

HCHO(mg/m ³)	Level	TVOC(mg/m ³)	Level
0-0.1	Good	0-0.5	Good
>0.1	Poor	>0.5	Poor

Image: Detailed tables outlining the Air Quality Index (AQI) categories and corresponding concentration ranges for PM2.5, PM10, HCHO, and TVOC, based on EPA and WHO standards.

PM2.5, PM10, and AQI Levels

PM2.5 (ug/m ³)	PM10 (ug/m ³)	AQI*	Index
0-12	0-54	0-50	Good
12.1-35.4	55-154	51-100	Moderate
35.5-55.4	155-254	101-150	Unhealthy for Sensitive Groups
55.5-150.4	255-354	151-200	Unhealthy
150.5-250.4	355-424	201-300	Very Unhealthy
≥250.5	≥425	≥301	Hazardous

HCHO and TVOC Levels

HCHO (mg/m ³)	Level	TVOC (mg/m ³)	Level
0-0.1	Good	0-0.5	Good
>0.1	Poor	>0.5	Poor

9. DATA STORAGE & EXPORT

The LKC-1000S+ is equipped with internal memory and a data export function:



Your Experts in Air Quality

Storage & Data Export*





- 

Memory allows at least 3 months of continuous data recording
- 

Data export function (via USB)

*LKC-1000S+2nd Gen.only

Image: The Temtop LKC-1000S+ monitor next to a laptop screen showing exported data in a spreadsheet format, illustrating the device's data storage and export capabilities.

- **Memory:** The device's memory allows for at least 3 months of continuous data recording.
- **Data Export:** Connect the device to a computer using the provided USB cable to export recorded data. Specific

software or drivers may be required, refer to the official Temtop website for details.

10. MAINTENANCE

To ensure the longevity and accuracy of your air quality detector, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use abrasive cleaners or solvents.
- **Sensor Care:** Avoid exposing the air inlets and outlets to dust, lint, or liquids, as this can affect sensor performance. Do not attempt to clean the internal sensors.
- **Storage:** When not in use for extended periods, store the device in its original storage box in a cool, dry place away from direct sunlight and extreme temperatures.
- **Charging:** Recharge the battery regularly, even if not in frequent use, to maintain battery health.

11. TROUBLESHOOTING

If you encounter issues with your Temtop LKC-1000S+, consider the following:

- **Inaccurate Readings:** Ensure the device has been allowed sufficient time to stabilize after power-on. Move the device to a different location to rule out localized anomalies. Avoid placing it near strong air currents, heat sources, or chemical fumes.
- **Device Not Powering On:** Check if the battery is charged. Connect the device to a power source using the USB cable and try again.
- **Screen Not Responding:** Try restarting the device by holding the power button. If unresponsive, allow the battery to fully discharge and then recharge before attempting to power on again.
- **Data Export Issues:** Ensure the USB cable is securely connected to both the device and the computer. Verify that any necessary drivers or software are installed on your computer.

For persistent issues, please contact Temtop customer support.

12. SPECIFICATIONS

Temtop LKC-1000S+ Specifications

Feature	Detail
Battery	1 Lithium Ion battery
Language	English
Product Dimensions	17.7 x 3.2 x 6.5 cm
Item Weight	0.47 Kilograms
Manufacturer	Temtop
Model Number	LKC-1000S+
Country of Origin	China
Power Source	Battery Powered
Color	Orange, Black
Alarm	Visual
Sensor Type	Electrochemical
Number of Units	1.0 Count
Number of Items	1

13. WARRANTY AND SUPPORT

Temtop provides the following support for your LKC-1000S+ Air Quality Detector:

- **Warranty:** A 12-month warranty is available from the date of purchase.
- **Returns & Exchanges:** Free returns and exchanges are available within 3 months of purchase.

For technical support, warranty claims, or further assistance, please refer to the contact information provided on the official Temtop website or your purchase documentation.