



User Manual

Mini Particle Counter with Bluetooth® Mobile App

Item Number: 20250-65

Introduction

The Cole-Parmer® Mini Particle Counter with Bluetooth® Connectivity allows you to transmit data directly to your Android™ or iOS® device using our free D/S particle mobile app. Now you can view data at a safe distance from potentially hazardous parameters, or even use your smart device as a real-time secondary display for checking measurements, eliminating the need to write down readings on paper. The results are automatically stored in the app with a date and time stamp and can be saved as a CSV file and emailed for future reference, manipulation, or analysis to help determine trends and conditions over a long period of time. You can also use the app to attach photos and notes to the records creating a clear reference point for your work.

Setup is simple. Download the free D/S particle app to your Android or iOS device. Place the particle counter in Bluetooth mode and open the app on your device. The counter will be sensed by your device and be listed as an available source that you can select. Once selected, the measured data is displayed on your smart device and some of the instrument functions can also be accessed. A full description of its operation is available for download in the app.

This handheld mini particle counter provides fast, easy and accurate readings for particle counts, particle mass concentration, air temperature, and relative humidity. Real-time measurements can be displayed on a 2-inch TFT LCD or recorded in memory. Proper use and care of this device will provide many years of reliable service.

Safety

- Do not use in extremely dusty environments. The intake of too many particles will damage the device.
- To ensure the measure accuracy, do not use in a foggy environment.
- Do not use in an explosive environment.
- Always follow the instructions for this device. Repairs should only be made by the manufacturer.

Unpacking

Check individual parts against the list of items below. If anything is missing or damaged, please contact your instrument supplier immediately.

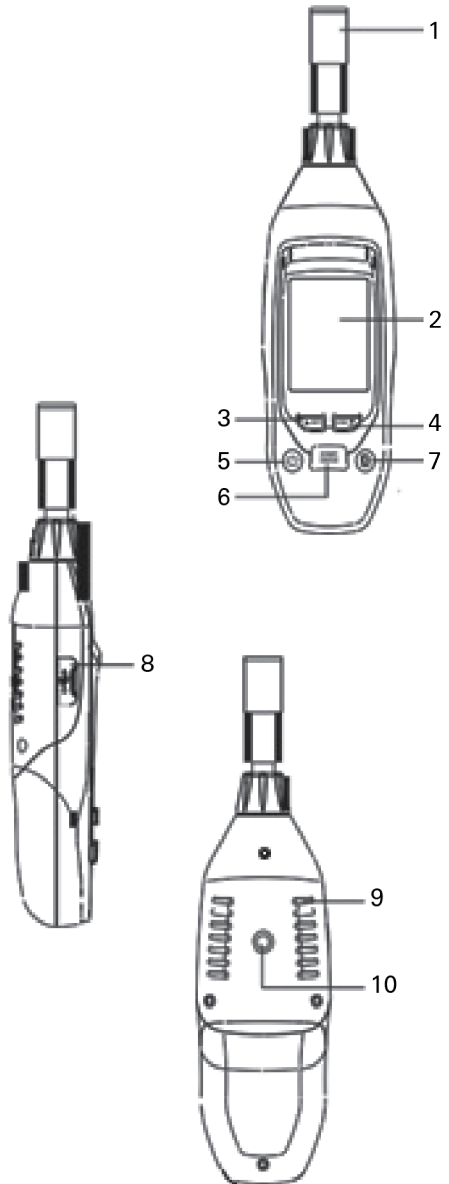
- Particle counter
- Sensor protective cap
- One 9 V battery
- Carrying case
- User manual

Key Features

- Bluetooth 4.0 interface
- User-friendly mobile app
- 2-inch TFT 220 x 176 pixel color LCD
- Measures PM2.5 and PM10 simultaneously
- Air temperature and humidity
- Real-time clock display
- Analog bar indicator
- Auto power-off

Meter Description

- 1. Particle sensor
- 2. LCD
- 3. SET/▲ button
- 4. ESC/▼ button
- 5. Power ON/OFF button
- 6. Start/Enter button
- 7. Bluetooth button
- 8. USB charge interface
- 9. Air-bleed hole
- 10. Bracket mounting hole



Setup and Operation

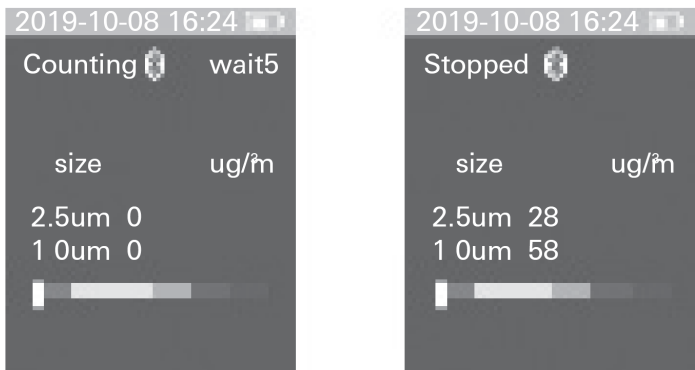
Measurement Mode

Press and hold the **Power ON/OFF** button until the color display turns on. Remove the protective cap from the sensor. Point the device at the area to be measured.

Press the **Start/Enter** button to begin measuring; the measurement will run for the selected sample time. The top left corner of the LCD will display measurement status “counting” and the bottom of the LCD will indicate the temperature and humidity readings.

Press the **Start/Enter** button again to stop measuring; the top left corner of the LCD will indicate “stopped”. The LCD displays the last measurement result for each channel. Data will be automatically saved to the meter memory which can store up to 5,000 readings.

When Bluetooth is activated, the data will be synchronized to the mobile terminal. When activating Bluetooth in real-time measurement mode, the real-time data will be displayed in the mobile terminal synchronously.

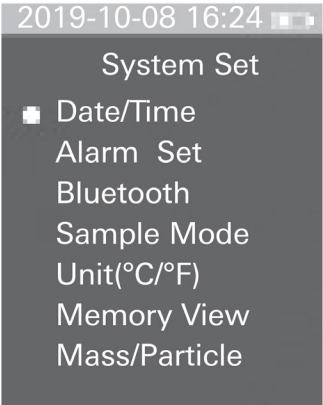


Setup and Operation (continued)

Setup Mode

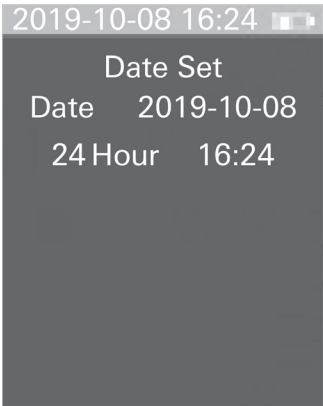
Powering on the meter, long press the **SET/▲** button to enter into the System Setup mode.

Use the **SET/▲** button and **ESC/▼** button to select the menu option needed, then press **Start/Enter** button to enter into the appropriate settings page.



Date/Time

After entering into Date/Time setup mode, press the **SET/▲** button and **ESC/▼** button to select the value, press **Start/Enter** button to set next value. After finishing the setup, long press **ESC/▼** button to return to the system settings mode.



Alarm

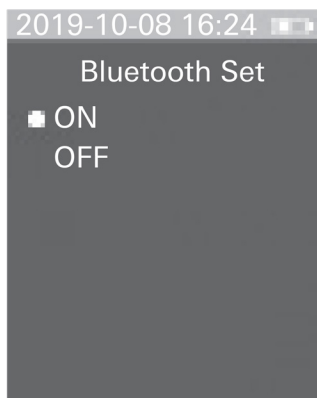
Use the **SET/▲** button and **ESC/▼** button to activate or deactivate alarm function. After finishing the setup, long press **ESC/▼** button to return to the system settings mode.



Setup and Operation (continued)

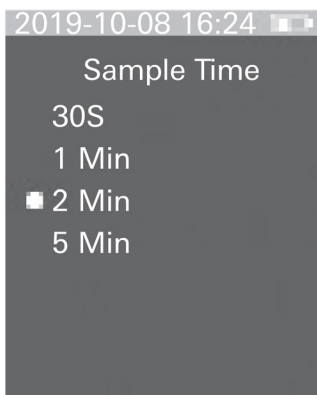
Bluetooth®

Use the **SET/▲** button and **ESC/▼** button to activate or deactivate the Bluetooth function. Bluetooth is activated by default. After finishing the setup, long press **ESC/▼** button to return to the system settings mode.



Sample Time

Use the **SET/▲** button and **ESC/▼** button to select the sampling time; 30 s, 1 min, 2 min, or 5 min. After finishing the setup, long press **ESC/▼** button to return to the system settings mode.



Unit of Measure (°C/°F)

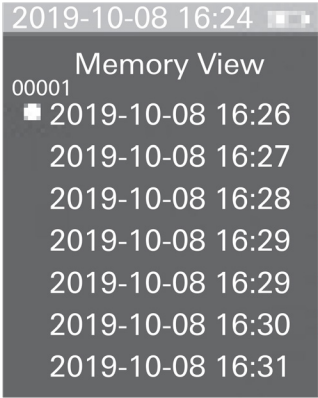
Use the **SET/▲** button and **ESC/▼** button to set the temperature unit; °C or °F. After finishing the setup, long press **ESC/▼** button to return to the system settings mode.



Setup and Operation (continued)

Memory View

Use the **SET/▲** button and **ESC/▼** button to select storage catalog; press **Start/Enter** button to view selected data set. Up to 5,000 sets of data can be stored in memory. Long press **ESC/▼** button return to the storage catalog. Long press **ESC/▼** button to return to the system settings mode.



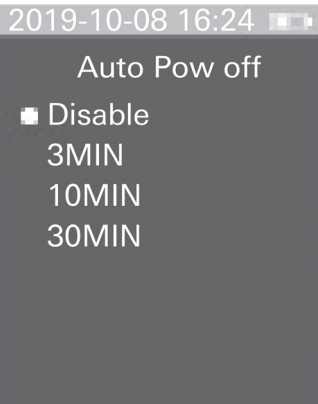
Mass/Particle

Use the **SET/▲** button and **ESC/▼** button to select whether the mass concentration is displayed or particles are counted. After finishing the setup, long press **ESC/▼** button to return to the system settings mode.



Automatic Power-Off

Use the **SET/▲** button and **ESC/▼** button to select whether the device switches off automatically after 3, 10, or 30 minutes of non-use; or completely disable the function. After finishing the setup, long press **ESC/▼** button to return to the system settings mode.



Setup and Operation (continued)

Shortcut Keys

- Press the Bluetooth icon button to turn the Bluetooth function on or off.
- To delete stored data in memory, first press and hold the **ESC/▼** button then press the Bluetooth icon button until the buzzer sounds.

Specifications

Particle Counter

Channels:	2.5 µm (PM2.5), 10 µm (PM10)
Mass concentration:	0 to 2,000 µg/m ³
Resolution:	1 µg/m ³

Air Temperature Measurement

Temperature range:	0 to 50 °C (32 to 122 °F)
Resolution:	0.1 °C/°F
Basic accuracy:	±1 °C (±2 °F)
Humidity range:	0 to 100% RH
Resolution:	0.1% RH
Basic accuracy:	±3.5% RH from 20 to 80% RH; ±5% RH remaining

Maintenance and Repair

- Clean the device with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Do not use any sprays, solvents, alcohol-based cleaning agents, or abrasive cleaners; only use clean water.
- The product must be repaired by the manufacturer.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

It is recommended that Cole-Parmer products are calibrated annually to ensure proper function and accurate measurements; however, your quality system or regulatory body may require more frequent calibrations.

To schedule your recalibration, please contact InnoCal, an ISO 17025 calibration laboratory accredited by A2LA.



Phone: 1-866-INNOCAL (1-866-466-6225)
E-mail: sales@innocalsolutions.com
Web: coleparmer.com/b/innocal



625 East Bunker Court
Vernon Hills, IL 60061
United States

United States

T: +1.800.323.4340 or
+1.847.549.7600
E: sales@antylia.com
W: coleparmer.com

Canada

T: +1.514.355.6100
E: info@antylia.ca
W: coleparmer.ca

China

T: 86.21.5109.9909
E: sales@antylia.com
W: coleparmer.cn

France

T: +33 (0) 1486 37800
E: fr.sales@antylia.com
W: coleparmer.fr

Germany

T: +49 (0) 9377 92030
E: de.sales@antylia.com
W: coleparmer.de

India

T: +9122 61394444
E: info@coleparmer.in
W: coleparmer.in

Italy

T: +39 (0) 284349215
E: it.sales@antylia.com
W: coleparmer.it

UK

T: +44 (0) 1480 272279
E: uk.sales@antylia.com
W: coleparmer.co.uk

Other

T: +1.847.549.7600