

## BTMETER BT-5000G

# BTMETER BT-5000G Cup Anemometer Instruction Manual

Model: BT-5000G

## 1. INTRODUCTION

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The BTMETER BT-5000G is a handheld cup anemometer designed for accurate measurement of wind speed, air flow volume (CFM), and wind temperature. Its 360° rotatable wind cup allows for measurements from any direction, making it suitable for various applications including HVAC system balancing, drone flying, sailing, and general weather monitoring.

This manual provides detailed instructions for the proper setup, operation, and maintenance of your BT-5000G anemometer to ensure optimal performance and longevity.

## 2. KEY FEATURES

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- **360° Rotatable Wind Cup:** Measures wind speed from any direction (0.3~30 m/s) with ±5% accuracy.
- **Air Flow Volume Measurement:** Tests air flow volume from 0 to 999900 CFM (cubic feet per minute).
- **Temperature Measurement:** Measures wind temperature from 14°F~113°F (-10°C~45°C) with ±3.6°F (±2°C) accuracy. Switchable between Fahrenheit and Celsius.
- **Multiple Measurement Modes:** Supports Max/Min measurement for wind speed and air flow volume.
- **Unit Versatility:** Five wind speed units (m/s, ft/min, Knots, Km/h, mph) and three air flow volume units (CFM, CMM, CMS).
- **Backlit LCD Display:** Ensures easy reading in low light conditions.
- **USB Rechargeable:** Convenient power source.
- **Data Hold Function:** Freezes current measurement data.
- **Low Power Indicator:** Alerts when battery is low.
- **Integrated Compass:** Provides directional guidance for outdoor activities.
- **Durable Design:** Dustproof and waterproof touch screen.

### 3. PACKAGE CONTENTS

Upon unpacking, please verify that all items listed below are present and in good condition:

- 1 x BTMETER BT-5000G Cup Anemometer
- 1 x User Manual
- 1 x USB Charging Cable

### 4. PRODUCT OVERVIEW

Familiarize yourself with the components of the BT-5000G anemometer:



Figure 1: Front view of the BT-5000G Anemometer with key features highlighted, including the compass, wind cups, LCD screen, and various function buttons.

- **Wind Cup Assembly:** Rotates to measure wind speed and direction.
- **LCD Display:** Shows wind speed, air flow, temperature, and other indicators.
- **Control Buttons:**
  - **Power Button:** Turns the device on/off.
  - **MODE Button:** Switches between measurement modes (e.g., current, Max, Min).

- **UNIT Button:** Changes units for wind speed, air flow, and temperature.
  - **MAX/MIN Button:** Activates maximum and minimum value display.
  - **SET Button:** Used for setting parameters or confirming selections.
  - **Backlight Button:** Toggles the display backlight.
- **Compass:** Integrated for directional reference.
  - **Type-C Charging Port:** Located on the side for recharging the internal battery.
  - **1/4" Metal Screw Hole:** Located at the bottom for tripod mounting.

## Tripod Mountable Design

Available to fix on most tripods for continuous wind measurement



Figure 2: Side view of the BT-5000G Anemometer illustrating its dimensions, the 1/4" metal screw hole for tripod mounting, and the Type-C charging port.

## 5. SETUP

### 5.1 Initial Charging

Before first use, ensure the BT-5000G is fully charged. Connect the provided USB Type-C cable to the charging port on the side of the device and to a standard USB power adapter (not included). The low power indicator on the display will show charging status.

### 5.2 Power On/Off

- To power on, press and hold the **Power Button** (usually marked with a circle and a vertical line) until the LCD display illuminates.
- To power off, press and hold the **Power Button** again until the display turns off.

### 5.3 Tripod Mounting (Optional)

For continuous or stationary measurements, the BT-5000G can be mounted on a standard tripod using the 1/4" metal screw hole at its base. Ensure the tripod is stable before mounting the device.

## 6. OPERATION

### 6.1 Basic Measurement

Once powered on, the device will display current wind speed and temperature. The 360° rotatable wind cup allows for accurate readings regardless of the device's orientation relative to the wind source.



Figure 3: The BT-5000G Anemometer in an outdoor setting, demonstrating its 360° rotating wind cup for omnidirectional wind measurement and the clear backlit LCD display.

### 6.2 Changing Units

Press the **UNIT Button** to cycle through available units for wind speed, air flow, and temperature.

- **Wind Speed Units:** m/s, ft/min, Knots, Km/h, mph

- **Air Flow Volume Units:** CFM, CMM, CMS
- **Temperature Units:** °C, °F

### 6.3 Max/Min Measurement Modes

To view the maximum or minimum recorded values during a measurement session:

1. Press the **MAX/MIN Button** once to display the maximum wind speed or air flow value.
2. Press it again to display the minimum wind speed or air flow value.
3. Press it a third time to return to current measurement mode.



Figure 4: The BT-5000G Anemometer's display showing the Max/Min measurement modes, allowing users to analyze peak and lowest wind conditions.

### 6.4 Data Hold

To freeze the current reading on the display, press the **HOLD Button** (if available, or typically a short press of the Power button or a dedicated button). Press it again to release the hold and resume live measurements.

### 6.5 Backlight Control

Press the **Backlight Button** (often indicated by a light bulb icon) to turn the LCD backlight on or off for improved visibility in various lighting conditions.

## 6.6 Air Flow Volume (CFM/CMM/CMS) Measurement

To measure air flow volume, you may need to input the area of the duct or vent. Refer to the device's on-screen prompts or the **SET Button** for area input. The device will then calculate and display the air flow volume based on the measured wind speed and the entered area.

# Wind Speed & Wind Flow

Measure not only wind speed, but also wind flow CFM



## Wind Speed

Accuracy:  $\pm 5\%$

Range: 59~5905ft/min

5 Unit Options: m/s, Ft/min, Knots,  
Km/h, Mph

## Wind Flow CFM

Range: 0~999900

Area: 0.001~9999

3 Unit Options: CMM(m<sup>3</sup>/min),  
CFM(ft<sup>3</sup>/min), CMS(m<sup>3</sup>/s)

Figure 5: The BT-5000G Anemometer's display showing both wind speed and calculated wind flow (CFM) measurements, along with their respective ranges and units.

## 6.7 Applications

The BT-5000G is versatile for both industrial and daily applications:

- **Industrial:** HVAC systems, dust collectors, ventilation systems.
- **Daily:** Drone driving, parachuting, sailing, golf, hiking, hunting, shooting, gliding.



Figure 6: Visual examples of the BTMETER BT-5000G Anemometer's diverse applications in both industrial settings (HVAC, dust collectors, ventilation) and daily activities (drone flying, parachuting, sailing).

## 7. MAINTENANCE

- **Cleaning:** Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the anemometer in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** Recharge the device regularly, even if not in frequent use, to maintain battery health. Avoid fully discharging the battery for extended periods.
- **Wind Cup Inspection:** Periodically check the wind cup assembly for any obstructions or damage that might affect rotation and accuracy.

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Low battery or no charge.	Connect to a USB power source and charge the device.

Problem	Possible Cause	Solution
Inaccurate wind speed readings.	Obstructed wind cups; device not held steadily; strong gusts.	Ensure wind cups are clear and rotate freely. Hold the device steady. Take multiple readings for average.
Display is dim or unreadable.	Backlight is off; low battery.	Press the Backlight Button. Recharge the device.
Cannot change units.	Incorrect mode; button malfunction.	Ensure you are in a measurement mode. Try pressing the UNIT button firmly.

## 9. SPECIFICATIONS

Parameter	Value
Brand	BTMETER
Model	BT-5000G
Wind Speed Range	0.3 ~ 30 m/s (59 ~ 5905 ft/min)
Wind Speed Accuracy	±5%
Air Flow Volume Range	0 ~ 999900 CFM
Temperature Range	14°F ~ 113°F (-10°C ~ 45°C)
Temperature Accuracy	±3.6°F (±2°C)
Wind Speed Units	m/s, ft/min, Knots, Km/h, mph
Air Flow Volume Units	CFM, CMM, CMS
Material	Plastic
Item Dimensions (L x W x H)	3.46 x 3.46 x 8 inches (87 x 87 x 203 mm)
Item Weight	180 Grams
Power Source	USB Rechargeable

## 10. OFFICIAL PRODUCT VIDEO

Your browser does not support the video tag.

Video 1: An overview of the BTMETER Anemometer Air Wind Meter, demonstrating its features and usage. This video is provided by the seller.

## 11. WARRANTY AND SUPPORT

The BTMETER BT-5000G Cup Anemometer comes with a **365-day quality warranty** from the date of purchase. This warranty covers manufacturing defects and ensures the product meets its specified performance standards.

For technical support, warranty claims, or any inquiries regarding your device, please contact BTMETER customer service through the retailer where the product was purchased or visit the official BTMETER

website for contact information.

Please retain your purchase receipt as proof of purchase for warranty purposes.