

## BTMETER BT-816B

# BTMETER BT-816B Mini Digital Anemometer User Manual

**MODEL: BT-816B**

*Your reliable companion for accurate wind speed and temperature measurements.*

## 1. Introduction

---

Thank you for choosing the BTMETER BT-816B Mini Digital Anemometer. This compact and highly accurate device is designed to measure wind speed, temperature, and wind chill. It is suitable for a wide range of applications, from outdoor activities like sailing and drone operation to industrial uses such as HVAC system testing. Please read this manual thoroughly before use to ensure proper operation and to maximize the device's lifespan.

## 2. Safety Information

---

- Do not expose the device to extreme temperatures, humidity, or direct sunlight for extended periods.
- Avoid dropping the device or subjecting it to strong impacts.
- Keep the device away from water and other liquids.
- Do not attempt to disassemble or modify the device, as this will void the warranty.
- Replace batteries promptly when the low battery indicator appears to ensure accurate readings.

## 3. Product Overview

---

The BTMETER BT-816B is a portable digital anemometer featuring a sensitive temperature sensor and 7 smooth fan shaft blades for precise measurements. It includes an LCD backlight for visibility in various lighting conditions and offers multiple measurement modes and units.



Figure 3.1: BTMETER BT-816B Mini Digital Anemometer

#### Key Features:

- Accurate wind speed measurement: 0.3~30m/s or 59~5905 ft/min ( $\pm 5\%$  of reading).
- Temperature measurement:  $-14^{\circ}\text{F} \sim 113^{\circ}\text{F}$  ( $-10^{\circ}\text{C} \sim 45^{\circ}\text{C}$ ) and Wind chill indication.
- Multi-mode operation: Max, Average, and Current wind speed.
- Selectable wind speed units: m/s, ft/min, knots, km/hr, mph.
- Switchable temperature units: Celsius ( $^{\circ}\text{C}$ ) / Fahrenheit ( $^{\circ}\text{F}$ ).
- LCD backlight for clear readings in low light.
- Manual/Auto power off function.
- Low battery indicator.



Figure 3.2: Key Features of the BT-816B Anemometer

## 4. Setup

The BTMETER BT-816B Anemometer requires a CR2032 button cell battery for operation. Ensure the battery is correctly installed before first use.

1. Locate the battery compartment on the back of the device.
2. Open the battery cover using a small screwdriver or coin.
3. Insert the CR2032 battery with the positive (+) side facing up.
4. Close the battery cover securely.

## 5. Operating Instructions

Follow these steps to operate your BTMETER BT-816B Anemometer:

1. **Power On/Off:** Press and hold the 'MODE' button for 3 seconds to power on the device. The display will show

'm/s' blinking. To power off, press and hold the 'SET' button until the display turns off.

2. **Select Measurement Unit:** After powering on, while 'm/s' is blinking, press the 'SET' button to cycle through desired measurement units (m/s, ft/min, knots, km/hr, mph). Press 'MODE' to confirm your selection.
3. **Switch Temperature Units:** Press the '°C/°F' button to switch between Celsius and Fahrenheit temperature displays.
4. **Select Measurement Mode:** Press the 'MODE' button (after unit selection) to cycle through the measurement modes: 'MAX' (maximum wind speed), 'AVG' (average wind speed), and 'CURRENT' (real-time wind speed).
5. **LCD Backlight:** The LCD backlight will activate when any button is pressed, improving visibility in dark conditions.

Your browser does not support the video tag.

Video 5.1: Demonstrating the basic operation of the BTMETER BT-816B Anemometer, including power on/off, switching temperature units, and selecting measurement modes.

## 5 WIND SPEED OPTIONAL





Figure 5.2: Display with and without backlight, showing different units.



Figure 5.3: Illustration of MAX, Average, and Real Time measurement modes.

## 6. Applications

The BTMETER BT-816B Anemometer is a versatile tool for various scenarios:

- **Outdoor Activities:** Ideal for shooting, sailing, mountain climbing, gliding, and kite flying to assess wind conditions.
- **Drone Operation:** Helps drone pilots determine safe flying conditions.
- **HVAC Systems:** Useful for testing and balancing air flow in heating, ventilation, and air conditioning systems.
- **Research & Education:** Suitable for scientific experiments and environmental studies.



Figure 6.1: Various applications of the BT-816B Anemometer.

## 7. Maintenance

- Clean the device regularly with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Ensure the fan blades are free from dust and debris for accurate readings. Use a soft brush if necessary.
- When not in use for an extended period, remove the battery to prevent leakage.
- Store the device in a cool, dry place, away from direct sunlight and extreme temperatures.

## 8. Troubleshooting

If you encounter issues with your anemometer, refer to the following common problems and solutions:

- **Device does not power on:** Check if the battery is installed correctly and has sufficient charge. Replace the battery if necessary.
- **Inaccurate readings:** Ensure the fan blades are spinning freely and are not obstructed. Verify that the device is held in the direction of the airflow.



- **Display is dim or flickering:** The battery may be low. Replace the battery.
- **No wind speed reading:** Ensure the fan is rotating. If not, check for obstructions or damage to the fan mechanism.

If the problem persists, please contact customer support.

9. Specifications

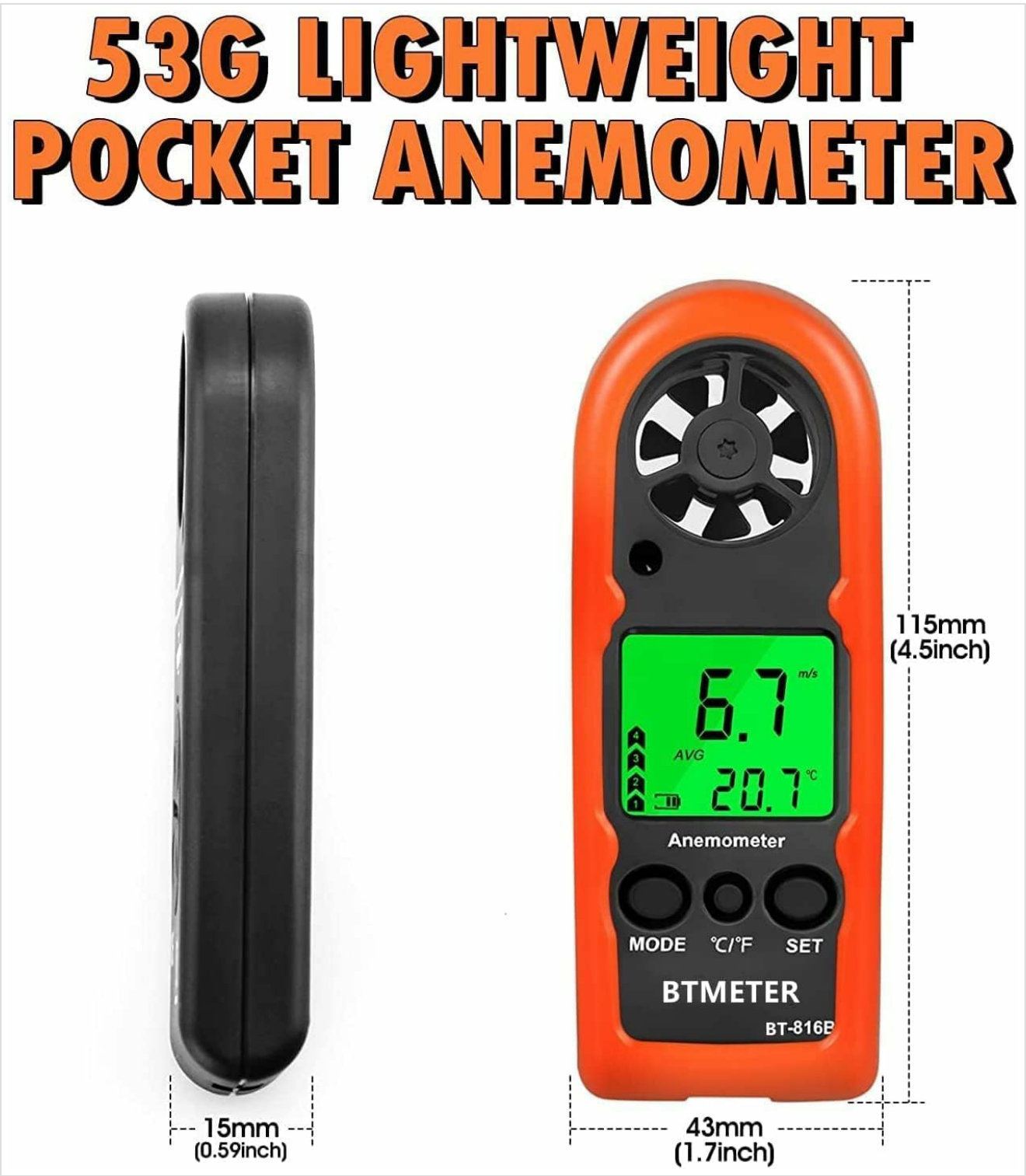


Figure 9.1: Dimensions of the BT-816B Anemometer.

Specification	Value
---------------	-------

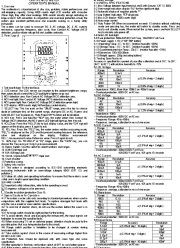
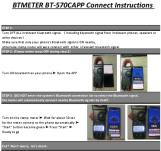
Specification	Value
Product Dimensions	1.57 x 0.59 x 4.53 inches
Item Weight	1.87 ounces (53 Grams)
Model Number	BT-816B
Brand	BTMETER
Material	Plastic
UPC	650740060743
Wind Speed Range	0.3~30 m/s
Temperature Range	-10°C~45°C (14°F~113°F)
Accuracy	±5% of reading
Battery Type	CR2032 (included)

## 10. Warranty and Support


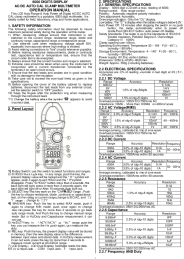
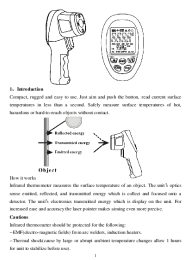

The BTMETER BT-816B Anemometer comes with a **365-day warranty** and **lifetime technical support**. If you have any questions, concerns, or require assistance with your device, please do not hesitate to contact BTMETER customer service. Our team is dedicated to providing prompt and helpful support.

For support, please visit the [BTMETER Store on Amazon](#) or refer to the contact information provided in your product packaging.

### Related Documents - BT-816B

	<p><a href="#">Digital Multimeter Operator's Manual - BTMETER BT-39K</a></p> <p>Operator's manual for the BTMETER BT-39K Digital Multimeter, detailing its features, specifications, operating instructions, safety precautions, and maintenance.</p>
	<p><a href="#">BTMETER BT-570CAPP Bluetooth Connection Guide</a></p> <p>Step-by-step instructions for connecting the BTMETER BT-570CAPP clamp meter to your smartphone via Bluetooth.</p>



<div><p>Quick Start Guide</p><p>1) Use the included Phillips screwdriver to remove the small cover at the bottom of the handle. Open the battery compartment. Remove two plates from the battery. Connect the battery to the compartment. Insert the cover back in.</p><p>2) Press the trigger while aiming at your non-flammable object. (DO NOT look into the end of the BTMETER when the laser comes out. It can harm your eyes.)</p><p>You should see the display</p></div>	<p><a href="#">BTMETER BT-1500 Quick Start Guide</a></p> <p>A quick start guide for the BTMETER BT-1500 infrared thermometer, covering battery installation, basic operation, and display interpretation.</p>
<div></div>	<p><a href="#">6000 Digits Clamp Multimeter Operation Manual</a></p> <p>Operation manual for the 6000 Digits AC/DC Auto Cal Clamp Multimeter, detailing safety information, specifications, measuring instructions, and maintenance.</p>
<div></div>	<p><a href="#">BTMETER BT-1500 Non-Contact Infrared Thermometer User Manual</a></p> <p>User manual for the BTMETER BT-1500 non-contact infrared thermometer, covering its introduction, how it works, safety warnings, quick start guide, maintenance procedures, and detailed specifications.</p>
<div></div>	<p><a href="#">Intelligent Digital Multimeter Operator's Manual - BTMETER BT-90EPD</a></p> <p>Comprehensive operator's manual for the BTMETER BT-90EPD Intelligent Digital Multimeter. Covers detailed specifications, safety guidelines, operating instructions for measuring voltage, current, resistance, capacitance, frequency, duty cycle, temperature, and battery testing. Features include a 4000-count LCD, auto/manual ranging, auto backlight, and Bluetooth connectivity for mobile app data logging and analysis.</p>