Testo testo 417

Testo 417 Digital Vane Anemometer User Manual

Model: testo 417

Introduction

The compact Testo 417 vane anemometer is designed for precise and straightforward measurement of air flow at inlets and outlets in air conditioning and ventilation systems. Its integrated 100 mm vane ensures rapid and accurate results. The device automatically calculates and displays time and point average values, as well as volumetric flow, enabling efficient adjustment of controlled residential ventilation systems.
The Testo Smart App enhances functionality by assisting with device configuration, displaying, storing, and documenting measured values, and transforming your smartphone into a secondary display. The testo 417 is also compatible with optional accessories, including measuring funnels for disc valves and ventilation grilles, and a flow straightener for precise results on swirl diffusers.





Image: The Testo 417 Digital Vane Anemometer, showing its main unit with display and control buttons, and the large 100 mm vane attached at the top. The display shows measurement readings.

What's in the Box

Upon unboxing your Testo 417, please verify that all components are present:

- Testo 417 Vane Anemometer
- Carrying Bag
- Calibration Protocol (or similar documentation)
- 3 AAA Batteries (pre-installed or included separately)



Image: The Testo 417 Anemometer neatly placed inside its custom-fitted carrying case, demonstrating the secure storage and portability of the device and its vane.

Setup

Battery Installation

The Testo 417 requires 3 AAA batteries for operation. These are typically included with the device. To install or replace batteries:

1. Locate the battery compartment on the back of the device.
2. Open the battery compartment cover.
3. Insert the 3 AAA batteries, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.

Device Overview



Image: A detailed view of the Testo 417 Anemometer with key components labeled, including the probe (vane), display, Bluetooth key, power switch, mode key, and the location of the battery compartment on the back. This image highlights how to measure inlets and outlets.

- **Probe (Vane):** The 100 mm vane at the top measures air velocity.
- **Display:** Shows measurement readings and menu options.
- **Bluetooth Key:** Activates Bluetooth for connection to the Testo Smart App.
- **Power Switch:** Turns the device on and off.
- **Mode Key:** Cycles through different measurement modes.
- **Menu/Enter Key:** Accesses menu options and confirms selections.

Connecting to the Testo Smart App

The Testo Smart App allows for enhanced functionality, data management, and remote display. To connect:

1. Download the "Testo Smart App" from your device's app store (iOS or Android).
2. Ensure Bluetooth is enabled on your smartphone.
3. Turn on the Testo 417 anemometer.
4. Press the Bluetooth key on the anemometer to activate pairing mode.
5. Open the Testo Smart App and follow the on-screen instructions to discover and connect to your Testo 417 device.



Image: The Testo 417 Anemometer positioned next to a smartphone displaying the Testo Smart App interface, illustrating how the app supports configuration, data display, storage, and documentation of measured values.

Operating Instructions

Basic Measurement

To perform a basic air velocity measurement:

1. Turn on the Testo 417 using the Power Switch.
2. Position the 100 mm vane directly into the airflow at the air inlet or outlet you wish to measure. Ensure the airflow passes through the vane unimpeded.
3. The display will show the current air velocity reading.
4. For stable readings, hold the device steady in the airflow.



Image: A user holding the Testo 417 Anemometer with its vane positioned directly into an air vent, demonstrating the practical application of the device for efficient regulation of balanced residential ventilation.

Advanced Measurement Modes

The Testo 417 can calculate time and point average values, as well as volumetric flow. Use the**Mode** and **Menu**/**Enter** keys to navigate through these functions:

- **Time Average:** Calculates the average air velocity over a specified period. Useful for fluctuating airflows.
- **Point Average:** Calculates the average air velocity from multiple spot measurements.
- **Volumetric Flow:** Automatically calculates the volume of air moving through a duct or opening. This requires inputting the cross-sectional area of the duct/opening into the device or via the Smart App.

Refer to the Testo Smart App for detailed guidance on configuring and utilizing these advanced measurement modes, including setting up duct dimensions for volumetric flow calculations.

Maintenance

To ensure the longevity and accuracy of your Testo 417 anemometer, follow these maintenance guidelines:

- **Cleaning:** Wipe the device and vane with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure no moisture enters the device.
- **Storage:** Store the anemometer in its carrying bag in a dry, dust-free environment when not in use.
- **Battery Care:** If the device will not be used for an extended period, remove the batteries to prevent leakage.
- **Calibration:** Regular calibration is recommended to maintain measurement accuracy. Refer to Testo's official website or contact their support for calibration services.

Troubleshooting

If you encounter issues with your Testo 417, consider the following common solutions:

- **Device not turning on:** Check battery installation and ensure batteries are not depleted. Replace if necessary.

- **Inaccurate readings:** Ensure the vane is clean and free from obstructions. Verify that the vane is positioned correctly in the airflow. Consider if calibration is due.
- **Bluetooth connection issues:** Ensure Bluetooth is enabled on both the anemometer and your smartphone. Restart both devices and try pairing again. Check the Testo Smart App for any specific connection troubleshooting steps.
- **Display not working:** Check batteries. If the issue persists, contact Testo customer support.

For more complex issues, please refer to the Testo Smart App's help section or contact Testo customer support directly.

Specifications

Detailed technical specifications for the Testo 417 Digital Vane Anemometer:

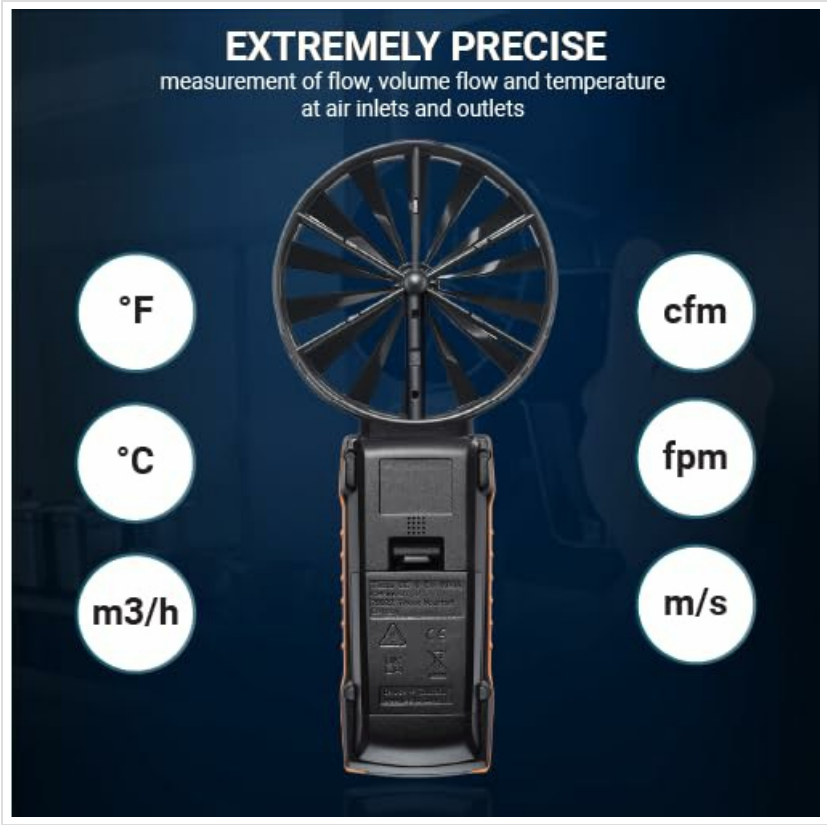


Image: The back view of the Testo 417 Anemometer, highlighting its robust construction and the location of the battery compartment. This image also visually represents the various measurement units the device supports, such as °F, °C, m³/h, cfm, fpm, and m/s, emphasizing its precision.



Image: A comprehensive table detailing the technical specifications of the Testo 417 Anemometer, including vane measuring range, accuracy, resolution, volume flow calculation ranges, NTC measuring range, accuracy, resolution, protection class, housing material, and battery life.

Feature	Specification
Model Number	testo 417
Brand	Testo
Power Source	3 AAA batteries (included)
Battery Life	50 hours
Product Dimensions (LxWxH)	4.5 x 10.8 x 2.36 cm (1.77 x 4.25 x 0.93 inches)
Item Dimensions (LxWxH)	45 x 108 x 24 mm (1.77 x 4.25 x 0.94 inches)
Item Weight	243 Grams (0.54 lbs)
Material	Plastic (ABS + PC / TPE for housing)
Country of Origin	China
Vane Measuring Range	+59.1 to +3937 fpm
Vane Measuring Accuracy	±19.7 fpm + 1.5 % of mv
Vane Measuring Resolution	0.01 fpm
Volume Flow Calculation Measuring Range (with funnel kit 0563 4170)	0 to +58857 cfm

Feature	Specification
Volume Flow Calculation Measuring Range (with funnel & flow straightener 0554 4172)	0.1 to +118 CFM
Volume Flow Resolution (0 to +58.8 CFM)	0.1 CFM
Volume Flow Resolution (+59 to +58857 CFM)	1 CFM
NTC Measuring Range	32° to 122 °F
NTC Measuring Accuracy	±0.9 °F
NTC Measuring Resolution	0.1 °F
Protection Class (Measuring Instrument)	IP 40
Protection Class (Probe)	IP20

Warranty and Support

For information regarding the warranty of your Testo 417 Digital Vane Anemometer, please refer to the documentation included with your product or visit the official Testo website. Testo provides comprehensive customer support for product inquiries, technical assistance, and service requests.
You can typically find support contact information on the Testo official website or within the Testo Smart App.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question