

Testo teso 425

Testo 425 Anemometer User Manual

Model: teso 425

[Introduction](#)[Setup](#)[Operating
Instructions](#)[Maintenance
Warranty &
Support](#)[Troubleshooting](#)[Specifications](#)

1. INTRODUCTION

The Testo 425 Anemometer is a handheld hot wire anemometer designed for precise measurement of air flow and temperature in ventilation ducts. This instrument provides quick and easy determination of air quality in in-duct systems, making it an essential tool for HVAC professionals. Its app compatibility allows for convenient setup, configuration, display, storage, and documentation of measured values, effectively turning your smartphone into a second display. The device features automatic calculation of time and point average values, enabling fast and reliable determination of airflow and velocity. The integrated cable-connected telescopic probe can extend up to 820 mm (approximately 32.3 inches), facilitating measurements in overhead or large diameter ducts.



Figure 1.1: Overview of the Testo 425 Anemometer with its main unit and telescopic hot wire probe.

2. SETUP

2.1 Unpacking and Initial Inspection

Upon receiving your Testo 425 Anemometer, carefully unpack all components and inspect them for any signs of damage. The standard scope of delivery includes:

- Testo 425 instrument
- Transport bag
- Calibration protocol
- 3 x AA batteries

2.2 Battery Installation

The Testo 425 requires 3 AA batteries for operation. These are included in the package. To install the batteries:

1. Locate the battery compartment on the rear of the instrument.
2. Open the battery compartment cover.
3. Insert the 3 AA batteries, ensuring correct polarity (+/-) as indicated inside the compartment.
4. Close the battery compartment cover securely.

2.3 Connecting the Telescopic Probe

The hot wire telescopic probe is cable-connected to the main unit. Ensure the connector is firmly inserted into the designated port on the Testo 425 instrument.



Figure 2.1: The Testo 425 main unit connected to its telescopic hot wire probe, highlighting the sensor at the tip.

2.4 App Connection (Optional)

The Testo 425 offers app compatibility for enhanced functionality. To connect the instrument to your smartphone or tablet:

1. Download the official Testo App from your device's app store.
2. Ensure Bluetooth is enabled on your smartphone/tablet.
3. Turn on the Testo 425 instrument.
4. Follow the instructions within the Testo App to pair with your device. The app will guide you through the configuration process and allow for display, storage, and documentation of measured values.

3. OPERATING INSTRUCTIONS

3.1 Powering On/Off

- To power on the device, press the **ON/OFF** button.
- To power off the device, press and hold the **ON/OFF** button until the display turns off.

3.2 Basic Measurement

The Testo 425 measures air velocity and temperature simultaneously. The current readings are displayed on the instrument's screen.



Figure 3.1: Example of the Testo 425 display during operation.

3.3 Using the Telescopic Probe

The telescopic probe can be extended to reach measurement points within ducts or elevated areas. Extend the probe carefully to the desired length, up to 820 mm (32.3 inches). Ensure the hot wire sensor at the tip of the probe is positioned correctly in the airflow for accurate readings.



Figure 3.2: The Testo 425 with its telescopic probe extended.

3.4 Calculating Average Values

The Testo 425 automatically calculates time and point average values for air velocity and volume flow. Refer to the instrument's on-screen menu or the connected app for options to initiate and view these calculations. This feature is particularly useful for assessing overall airflow performance in a duct system.

3.5 Volume Flow Measurement

To measure volume flow, you may need to input the cross-sectional area of the duct into the instrument or the connected app. The Testo 425 will then use the measured air velocity to calculate the volume flow rate.

4. MAINTENANCE

4.1 Cleaning the Instrument

Keep the instrument clean to ensure optimal performance and longevity. Use a damp cloth to wipe the housing. Do not use abrasive cleaners or solvents. Ensure no moisture enters the probe tip or electrical connections.

4.2 Probe Care

The hot wire sensor at the tip of the telescopic probe is delicate. Handle it with care. Avoid touching the sensor directly or exposing it to excessive dust or debris, which can affect measurement accuracy. When not in use, retract the probe and store it in the transport bag provided.

4.3 Battery Replacement

When the battery indicator on the display shows low power, replace all three AA batteries. Refer to section 2.2 for battery installation instructions. Always use fresh, high-quality alkaline batteries.

4.4 Calibration

Regular calibration is recommended to maintain the accuracy of your Testo 425. Refer to the provided calibration protocol for details. For professional calibration services, contact Testo customer support.

5. TROUBLESHOOTING

Problem	Possible Cause	Solution
Instrument does not power on.	Dead or incorrectly installed batteries.	Check battery polarity. Replace batteries with new ones.
Inaccurate readings.	Dirty or damaged hot wire sensor; probe not positioned correctly; instrument needs calibration.	Gently clean the sensor (if safe to do so, refer to maintenance). Ensure probe is fully extended and positioned in the center of the airflow. Consider professional calibration.
Cannot connect to app.	Bluetooth off; app not updated; instrument not in pairing mode.	Ensure Bluetooth is enabled on your smart device. Update the Testo App. Restart both the instrument and your smart device.
Display is blank or frozen.	Software glitch; low battery.	Remove and reinsert batteries to perform a hard reset. Replace batteries if low.

6. TECHNICAL SPECIFICATIONS

Parameter	Value
Model Number	teso 425
Temperature Measuring Range (NTC)	-20 to +158 °F / -20 to +70 °C
Temperature Accuracy	±0.9 °F / ±0.5 °C
Temperature Resolution	32.2 °F / 0.1 °C
Velocity Measuring Range (Thermal Anemometer)	0.01 to 5906 fpm / 0.01 to 30 m/s
Velocity Accuracy	±(5.91 fpm + 4.0 % of mv) (0.01 to +3937 fpm) ±(0.03 m/s + 4.0 % of mv) (0.01 to +20 m/s) ±(98.4 fpm + 5.0 % of mv) (20.01 to +5906 fpm) ±(0.5 m/s + 5.0 % of mv) (20.01 to +30 m/s)
Velocity Resolution	1.97 fpm / 0.01 m/s

Parameter	Value
Weight	9 oz. / 268 g
Dimensions (L x W x H)	5 x 2 x 1 in. / 135 x 60 x 28 mm
Operating Temperature	-4 to +122 °F / -20 to +50 °C
Probe Operating Temperature	-4 to +158 °F / -20 to +70 °C
Housing Material	ABS + PC / TPE
Diameter Probe Shaft	0.295 in. / 7.5 mm
Cable Length	4.921 ft. / 1.5 m
Protection Class	IP40, IP20
Length Probe	7.087 in. / 180 mm
Battery Type	3x AA
Battery Life	35 h
Storage Temperature	-4 to +122 °F / -20 to +50 °C

7. WARRANTY AND SUPPORT

7.1 Warranty Information

Testo products are manufactured to high-quality standards. For specific warranty terms and conditions applicable to your Testo 425 Anemometer, please refer to the documentation included with your purchase or visit the official Testo website. Protection plans may also be available for extended coverage.

7.2 Customer Support

For technical assistance, service, or inquiries regarding your Testo 425, please contact Testo customer support. You can find contact information and additional resources by visiting the official Testo Store online:

[Visit the Testo Store](#)



Figure 7.1: Testo Brand Logo.

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