

## Testo 550s

# Testo 550s AC Manifold Gauge Set

Instruction Manual

Brand: Testo | Model: 550s

## 1. INTRODUCTION

The Testo 550s is an advanced digital manifold designed to meet the demands of HVAC professionals working on refrigeration and air conditioning systems, as well as heat pumps. Built for precision, efficiency, and ease of use, it streamlines system diagnostics by providing highly accurate pressure and temperature measurements. Its rugged, compact design ensures durability in harsh working conditions, while the large display allows for easy readability of all critical data at a glance.

With integrated Bluetooth connectivity, the Testo 550s enhances workflow efficiency by wirelessly transmitting measurement data to the Testo Smart App, where users can analyze results, generate reports, and store documentation in real-time. This seamless digital integration reduces manual errors, improves reporting accuracy, and simplifies system monitoring, making it an indispensable tool for professionals seeking to optimize their processes.

Designed for versatility, the Testo 550s is compatible with a broad range of refrigerants, including A2L refrigerants, ensuring compliance with modern industry standards.

## 2. WHAT'S IN THE BOX

Your Testo 550s AC Manifold Gauge Set includes the following components:

- Instrument (Testo 550s Digital Manifold)
- 2 Wired Temperature Clamp Probes
- User Manual
- Batteries (4 AA)
- Hardshell Transport Case



Figure 2.1: Components of the Testo 550s Basic Kit, showing the digital manifold, two wired temperature probes, and the hardshell transport case.

### 3. SETUP

Follow these steps to set up your Testo 550s digital manifold:

1. **Insert Batteries:** Open the battery compartment and insert the 4 AA batteries provided.
2. **Connect Temperature Probes:** Attach the two wired temperature clamp probes to the designated ports on the manifold. These probes are essential for accurate temperature measurements and superheat/subcooling calculations.
3. **Connect Hoses:** Connect your refrigerant hoses to the appropriate high and low-pressure ports on the manifold. Ensure secure connections to prevent leaks.
4. **Power On:** Press the power button to turn on the Testo 550s. The display will illuminate, showing initial readings.
5. **Install Testo Smart App:** Download and install the "Testo Smart" app on your smartphone or tablet from your device's app store. This app enhances functionality and allows for remote operation and data logging.
6. **Pair via Bluetooth:** The Testo 550s features integrated Bluetooth connectivity. Open the Testo Smart App and follow the on-screen instructions to pair your manifold with your mobile device. This enables wireless data transmission and remote control.

## Testo 550s Digital Manifold

User-friendly &  
easy to handle

Extremely accurate  
and reliable data

Durable design with IP54  
protection class

App operation and automatic  
Bluetooth connection



Figure 3.1: The Testo 550s digital manifold is designed for user-friendly operation with a clear display, allowing for easy handling.





Easy measurements on refrigeration, air conditioning systems, and heat pumps - thanks to the intuitive menu, automatic connection, and automatic calculations

Figure 3.2: The manifold connected to an HVAC system, demonstrating its application for easy measurements on refrigeration, air conditioning systems, and heat pumps, thanks to its intuitive menu and automatic calculations.

## 4. OPERATING INSTRUCTIONS

The Testo 550s offers versatile measurement capabilities for HVAC and refrigeration systems. Here are key operating features:

- **Precise Measurements:** The manifold provides highly accurate readings for temperature (-58° to 302°F / -50 to +150°C) and pressure (-15 to 870 psi / -1 to 60 bar). Temperature accuracy is  $\pm 0.9^\circ\text{F}$  ( $\pm 0.5^\circ\text{C}$ ) and pressure accuracy is  $\pm 0.5\%$  Full Scale.
- **Automatic Calculations:** With the connected temperature probes, the Testo 550s automatically calculates superheat and subcooling, simplifying diagnostics and system optimization.
- **Refrigerant Compatibility:** Supports most common refrigerant types, as well as A2L refrigerants, ensuring broad applicability.
- **Smart App Integration:** Use the Testo Smart App for remote operation, real-time data visualization, graphical progression display, and intelligent error analysis. You can also generate and send reports directly from the job site.

## 4.1. Using the Testo Smart App

The Testo Smart App significantly enhances the functionality of your 550s manifold. It allows for:

- **Remote Control:** Operate the manifold and view measurements from a distance.
- **Data Logging:** Record measurement data over time for detailed analysis.
- **Report Generation:** Create professional reports with all relevant data, including graphs and tables.
- **Firmware Updates:** Keep your manifold updated with the latest features and refrigerant profiles directly through the app.



Figure 4.1: Intelligent error analysis, wireless measurements, and graphical progression display on a large screen are all thanks to the app connection.

## 4.2. Pressure Leak Test

The Testo 550s supports pressure leak testing with temperature compensation. This feature is crucial for verifying system integrity after installation or repair.

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Video 4.2.1: This official Testo video demonstrates the pressure leak test function of the Testo 550s and 557s digital manifolds, showing how to perform the test and interpret results for system integrity.

### 4.3. Refrigerant Selection and Updates

The manifold allows for easy selection of refrigerants directly on the device or through the app. New refrigerant profiles are automatically updated via the Testo Smart App, ensuring compatibility with the latest industry standards.

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Video 4.3.1: This official Testo video explains how to manage refrigerant selection and automatic updates using the Testo 550s and 557s Smart App, ensuring your device is always up-to-date with the latest refrigerant profiles.

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Video 4.3.2: This official Testo video provides a quick overview of the key highlights and features of the Testo 550s digital manifold, including its robust design, precise measurements, and smart app connectivity.

## 5. MAINTENANCE

To ensure the longevity and accuracy of your Testo 550s, regular maintenance is recommended:

- **Cleaning:** Wipe the instrument and probes with a damp cloth. Do not use aggressive cleaning agents.
- **Storage:** Store the manifold and accessories in the provided hardshell case when not in use to protect them from damage.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display.
- **Calibration:** For continued accuracy, periodic calibration by a certified service center is recommended.

## 6. TROUBLESHOOTING

If you encounter issues with your Testo 550s, consider the following common troubleshooting steps:

- **No Power:** Check if batteries are correctly inserted and charged. Replace if necessary.
- **Bluetooth Connectivity Issues:** Ensure Bluetooth is enabled on both the manifold and your mobile device. Restart both devices and try pairing again. Make sure the Testo Smart App is up to date.
- **Inaccurate Readings:** Verify that probes are securely connected and properly clamped to the pipes. Ensure the correct refrigerant type is selected in the manifold settings or app. Consider if calibration is due.
- **Leak Test Failure:** Double-check all connections for tightness. Use a leak detection spray to pinpoint any small leaks in the system or manifold connections.

For persistent issues, refer to the detailed user manual or contact Testo customer support.

## 7. SPECIFICATIONS

Feature	Detail
Temperature Measurement Range	-58° to 302°F (-50 to +150°C)
Temperature Measurement Accuracy	±0.9°F (±0.5°C)
Pressure Measurement Range	-15 to 870 psi (-1 to 60 bar)
Pressure Measurement Accuracy	±0.5% Full Scale



Dimensions	8.27 x 4.76 x 2.36 inches (210 x 121 x 60 mm)
Weight	29.14 oz (826 g)
Operating Temperature	-4° to 122°F (-20 to +50°C)
Protection Class	IP54
Housing Material	ABS/PA/TPE
Batteries	4 AA batteries (included)
Screen Size	4.8 Inches

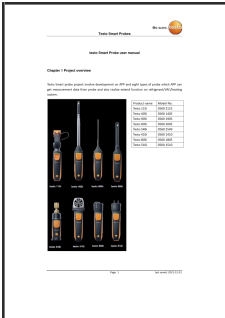
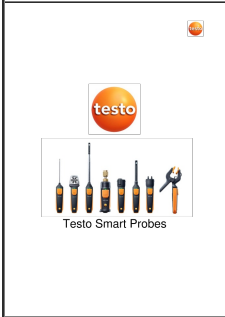
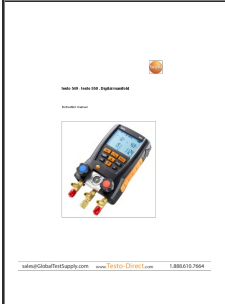
## 8. WARRANTY AND SUPPORT




Testo products are manufactured to high-quality standards. For detailed warranty information, please refer to the official Testo website or the warranty card included with your product.

For technical support, service, or additional inquiries, please visit the official Testo website or contact their customer service department.

An electronic version of the user manual is available for download:[Testo 550s User Manual \(PDF\)](#)

### Related Documents - 550s

	<p><a href="#">Testo Smart Probes User Manual: Features, Specifications, and Operation</a></p> <p>Comprehensive user manual for Testo Smart Probes, detailing features, technical specifications, safety guidelines, and operation principles for models like testo 405i, 410i, 510i, 549i, 605i, 115i, 905i, and 805i. Includes product overview, technical data, and approval information.</p>
	<p><a href="#">Testo Smart Probes User Manual and Technical Data</a></p> <p>Comprehensive guide to Testo Smart Probes, detailing setup, app usage, measurement applications, troubleshooting, and technical specifications for models like testo 115i, 405i, 510i, and more.</p>
	<p><a href="#">Testo 549 &amp; 550 Digital Manifold Instruction Manual</a></p> <p>Instruction manual for Testo 549 and 550 digital manifolds. Covers safety, product overview, operation, technical specifications, maintenance, and troubleshooting for refrigeration and heat pump systems.</p>

	<p><a href="#">Testo 552i Smart Vacuum Probe: Quick Start Guide and Specifications</a></p> <p>Comprehensive guide to the Testo 552i smart vacuum probe, including product features, technical specifications, operating instructions, and international certifications. Learn about its Bluetooth connectivity, measurement capabilities, and app integration for HVAC and refrigeration applications.</p>
	<p><a href="#">Testo Smart Valve 0560 5600: Quick Start Guide and Regulatory Compliance</a></p> <p>Comprehensive guide to the Testo Smart Valve (Model 0560 5600), including setup instructions, product specifications, and international regulatory approvals from FCC, IC, EU, UK, Japan, and South Korea.</p>
	<p><a href="#">Testo Comfort Software Basic 5 Instruction Manual</a></p> <p>A comprehensive instruction manual for the Testo Comfort Software Basic 5, detailing its features, system requirements, installation, and usage for data logging and analysis.</p>