

# **Digital manifold**

testo 550s – the manifold with Bluetooth and 2-way valve block for commissioning, servicing and maintenance of refrigeration systems and heat pumps

All results at a glance thanks to the large graphic display

Exceptionally compact and reliable thanks to the

easy-to-handle, robust housing with IP 54 protection class

Simple, wireless measurement of vacuum and temperature via automatic Bluetooth connection

Even greater flexibility for your measurements and documentation with the testo Smart App

Even easier to get results, thanks to guided measurement menus for target superheat, vacuum and pressure loss

Convenient refrigerant management in the App with favourites and automatic updates

Can be used for applications with A2L refrigerant, taking into account the relevant legislation, norms and guidelines for refrigeration systems

550 testo & Jane 122 3.5 47.3 °c 3.0 °c <sup>(2 (213)</sup> 40.8 °c 15.5 °c 6.5ĸ 12.5 bar micron kPa psi °C/°F MPa hPa inch Hg Bluetooth 5.0 + App testo Smart App for free download Google Play

The testo 550s digital manifold with 2-way valve block enables you to carry out your measurements on refrigeration and air conditioning systems and heat pumps particularly fast. The large display also helps you to evaluate the results in graphic form. Stored programs guide you through the measurement and enable the automatic determination of numerous important system parameters such as superheat, pressure drop test or evacuation. Bluetooth probes for temperature, pressure and humidity can be easily connected directly to the instrument and offer maximum flexibility in their application. In conjunction with the testo Smart App, you can take care of digital documentation directly on site. In addition to this, you always have the current refrigerants available to you, and can set your favourites and transfer them to the instrument. Its proven quality and great durability guarantee the continuously high performance of your manifold in all conditions.



### Technical data/accessories/kits

#### Sensor types

|                                | Pressure  | Temperature          |  |
|--------------------------------|---|----------------------|--|
| Measuring range                | -1 to 60 bar  | -50 to +150 °C       |  |
| Accuracy<br>(at 22 °C)         | ±0.5% fs ±0.5 °C  |                      |  |
| Resolution                     | 0.01 bar  | 0.1 °C               |  |
| Probe connections              | 3 x 7/16" – UNF   | 2 x plug-in (NTC)    |  |
| Overload                       | 65 bar  | -                    |  |
| General technical dat          | a   |                      |  |
| Operating temperature          | -20 to +50 °C   |                      |  |
| Storage temperature            | -20 to +60 °C   |                      |  |
| Battery type                   | 4 AA microcells   |                      |  |
| Battery life                   | 250 h with no illumination, no Bluetooth <sup>®</sup><br>100 h with illumination and Bluetooth <sup>®</sup> |                      |  |
| Auto power off                 | After 10 minutes when not connected via Bluetooth   |                      |  |
| Dimensions                     | 210 x 121 x 60 mm   |                      |  |
| Weight                         | 826 g   |                      |  |
| Protection class               | IP54  |                      |  |
| Bluetooth technology/<br>range | Bluetooth <sup>®</sup> 5.0/150 m  | l                    |  |
| Compatibility                  | requires iOS 11.0 or r<br>newer   | newer/Android 6.0 or |  |
|                                | requires mobile termi<br>Bluetooth <sup>®</sup> 4.0   | nal device with      |  |
|                                |   |                      |  |



#### The testo Smart App

- For all applications of the testo 550s from measurement to documentation
- Compatible with all Bluetooth-enabled Testo measuring instruments for air conditioning/ refrigeration systems and heat pumps
- Measurement errors are easily prevented thanks to menus that offer optimum support,
- e.g. for superheating and subcooling

  Quick analysis thanks to clear presentation of
- the values, e.g. in a table
  Create digital measurement reports including photos as PDF/CSV files on site and email them straight away

## Measuring instrument accessories Magnetic belt for digital manifolds for

flexible use of the magnet or hook thanks flexible use of the magnet or hook thanks to a simple exchange system, compatible with all digital manifolds from Testo Valve spare parts kit; exchange of 2 valve positioners with 4 valve positioner covers (red, blue and 2 x black), compatible with all digital manifolds from Testo.

|   | Order no. |  |
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| testo 550s kits   |  |  |   |  |
|---|--|--|---|--|
|   | testo 550s Basic Kit<br>Smart digital manifold with<br>fixed cable temperature<br>probes | testo 550s Smart Kit<br>Smart digital manifold with<br>wireless temperature probes | testo 550s Smart Kit with<br>filling hoses<br>Smart digital manifold with<br>wireless temperature probes<br>and hose filling set (3 pcs.) |  |
|   |  |  |   |  |
| Order no.   | 0564 5501  | 0564 5502  | 0564 5503   |  |
| Kit components  |  |  |   |  |
| testo 550s<br>Smart digital manifold                            |  |  |   |  |
| Calibration protocol  |  |  |   |  |
| Clamp temperature probe kit                                     |  |  |   |  |
| testo 115i<br>Wireless clamp temperature<br>probe (Smart Probe) |  | 2 x  | 2 x   |  |
| Hose filling set (3 hoses)                                      |  |  |   |  |
| Instrument case   |  |  |   |  |



## **Testo Smart Probes**

### testo 115i

testo 115i, clamp thermometer operated with smartphone, for measurement on pipelines with diameters of 6 to max. 35 mm, including batteries and calibration protocol



Order no. 0560 2115 02

| Sensor type                  | NTC   |
|------------------------------|---|
| Measuring range              | -40 to +150 °C  |
| Accuracy<br>±1 digit         | ±1.3 °C (-20 to +85 °C)   |
| Resolution                   | 0.1 °C  |
| General technical dat        | a   |
| Compatibility                | requires iOS 11.0 or newer/Android 6.0 or newer                 |
|                              | requires mobile terminal device with Bluetooth <sup>®</sup> 4.0 |
| Storage temperature          | -20 to +60 °C   |
| Operating temperature        | -20 to +50 °C   |
| Battery type                 | 3 AAA microcells  |
| Battery life                 | 150 h   |
| Dimensions                   | 183 x 90 x 30 mm  |
| Bluetooth <sup>®</sup> range | up to 100 m   |
|                              |   |

### testo 605i

testo 605i, thermohygrometer operated with smartphone, including batteries and calibration protocol



Order no. 0560 2605 02

| Sensor type                  | Humidity – capacitive                     |  |
|------------------------------|---|--|
| Measuring range              | 0 to 100 %RH                              |  |
| Accuracy                     | ±3.0 %RH (10 to 35 %RH)                   |  |
| (at +25 °C)                  | ±2.0 %RH (35 to 65 %RH)                   |  |
| ±1 digit                     | ±3.0 %RH (65 to 90 %RH)                   |  |
|                              | ±5 %RH (< 10 %RH or > 90 %RH)             |  |
| Resolution                   | 0.1 %RH                                   |  |
| Sensor type                  | NTC                                       |  |
| Measuring range              | -20 to +60 °C                             |  |
| Accuracy                     | ±0.8 °C (-20 to 0 °C)                     |  |
| ±1 digit                     | ±0.5 °C (0 to +60 °C)                     |  |
| Resolution                   | 0.1 °C                                    |  |
| General technical dat        | a   |  |
| Compatibility                | requires iOS 11.0 or newer/Android 6.0 or |  |
|                              | newer                                     |  |
|                              | requires mobile terminal device with      |  |
|                              | Bluetooth <sup>®</sup> 4.0                |  |
| Storage temperature          | -20 to +60 °C                             |  |
| Operating temperature        | -20 to +50 °C                             |  |
| Battery type                 | 3 AAA microcells                          |  |
| Battery life                 | 150 h                                     |  |
| Dimensions                   | 218 x 30 x 25 mm                          |  |
|                              | 73 mm probe shaft                         |  |
| Bluetooth <sup>®</sup> range | up to 100 m                               |  |

### testo 552i

testo 552i, app-controlled wireless vacuum probe, including batteries and calibration protocol



Order no. 0564 2552

| Sensor type                  | Pressure                                  |
|------------------------------|---|
| Measuring range              | 0 to 26.66 mbar/0 to 20000 microns        |
| Accuracy                     | $\pm 10$ microns + 10% of m.v.            |
| ±1 digit                     | (100 to 1000 microns)                     |
| Resolution                   | 1 micron (0 to 1000 microns)              |
|                              | 10 microns (1000 to 2000 microns)         |
|                              | 100 microns (2000 to 5000 microns)        |
| Connection                   | 7/16" – UNF                               |
| Overload                     | 6.0 bar/87 psi (relative: 5.0 bar/72 psi) |
| General technical dat        | ta  |
| Connection                   | Bluetooth 4.2                             |
| Bluetooth <sup>®</sup> range | 150 m                                     |
| Storage temperature          | -20 °C to +50 °C                          |
| Operating temperature        | -10 °C to +50 °C                          |
| Battery type                 | 3 AAA microcells                          |
| Battery life                 | 39 h                                      |
| Auto power off               | After 10 minutes when not connected via   |
|                              | Bluetooth                                 |
| Protection class             | IP54                                      |
| Dimensions                   | 150 x 32 x 31 mm                          |
| Weight                       | 142 g                                     |



## Probes

| Probe type   | Dimensions<br>Probe shaft/probe shaft tip |                 | Measuring<br>range  | Accuracy  | Order no. |
|--|---|-----------------|---|---|-----------|
| Air probe  |   |                 |   |   |           |
| Precise, robust NTC air probe  | ■ 0 115 mm<br>Ø 5 mm                      | 50 mm<br>Ø 4 mm | -50 to +125 °C  | ±0.2 °C (-25 to +80 °C)<br>±0.4 °C (remaining meas. range)  | 0613 1712 |
| Surface probe  |   |                 |   |   |           |
| Clamp probe for temperature in kit<br>for measurements on pipes from<br>6 to 35 mm diameter, NTC, fixed<br>cable 1.5 m | æ.  | d<br>C          | -40 to +125 °C  | ±1 °C (-20 to +85 °C)   | 0613 5507 |
| Clamp probe for temperature<br>measurements on pipes from 6 to<br>35 mm diameter, NTC, fixed cable<br>5.0 m            | đ   |                 | -40 to +125 °C  | ±1 °C (-20 to +85 °C)   | 0613 5506 |
| Pipe wrap probe with Velcro tape<br>for pipe diameters of up to max. 75<br>mm, Tmax +75 °C, NTC,<br>fixed cable 1.5 m  | 300 mm                                    | 30 mm           | -50 to +70 °C   | ±0.2 °C (-25 to +70 °C)<br>±0.4 °C (-50 to -25.1 °C)  | 0613 4611 |
| Pipe wrap probe (NTC) for pipe<br>diameters of 5 to 65 mm, fixed<br>cable 2.8 m  |   | -               | -50 to +120 °C  | ±0.2 °C (-25 to +80 °C)   | 0613 5605 |
| Watertight NTC surface probe for<br>flat surfaces,<br>fixed cable 1.2 m  | 115 mm<br>Ø 5 mm                          | 50 mm<br>Ø 6 mm | -50 to +150 °C<br>Long-term<br>measuring<br>range +125°C,<br>briefly +150 °C<br>(2 minutes) | ±0.5% of measured value (+100 to +150 °C)<br>±0.2 °C (-25 to +74.9 °C)<br>±0.4 °C (remaining meas. range) | 0613 1912 |

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www.testo.com



# Clamp thermometer operated with smartphone

#### testo 115i

Compact professional measuring instrument from the Testo Smart Probes series for use with smartphones/tablets

Measurement of flow and return temperature of heating systems

Temperature measurement on refrigeration systems for calculation of superheating and subcooling

Fast identification of temperature changes by graphic progression display

Measurement data analyzed and sent via testo Smart App

Problem-free use at measuring points that are a long distance apart – Bluetooth<sup>®</sup> range up to 100 m



In conjunction with a smartphone or tablet, the handy testo 115i clamp thermometer is suitable for servicing and troubleshooting on air conditioning and refrigeration systems, as well as for their installation. In addition, the measuring instrument can also be used to measure flow and return temperatures. The testo 115i makes it considerably easier to work on measuring points that are a long distance apart, thanks to wireless connection to a smartphone or tablet. And simultaneous use of the testo 549i high-pressure measuring instrument also enables calculation of individual refrigeration system parameters, such as superheating and subcooling. Users can read off their measuring values conveniently via the testo Smart App installed on the terminal device. All measurement data are presented either as a graph or a table. Finally, the measurement data reports can be sent directly as pdf or Excel files.



## **Technical data/accessories**

### testo 115i

testo 115i, clamp thermometer operated with smartphone, for measurement on pipelines with diameters of 6 to max. 35 mm, including batteries and calibration protocol

Order no. 0560 2115 02



| Sensor type          | NTC                     |
|----------------------|-------------------------|
| Measuring range      | -40 to +150 °C          |
| Accuracy<br>±1 digit | ±1.3 °C (-20 to +85 °C) |
| Resolution           | 0.1 °C                  |

#### General technical data

| Compatibility                | requires iOS 11.0 or newer /<br>Android 6.0 or newer            |
|------------------------------|---|
|                              | requires mobile terminal device with Bluetooth <sup>®</sup> 4.0 |
| Storage temperature          | -20 to +60 °C   |
| Operating temperature        | -20 to +50 °C   |
| Battery type                 | 3 micro batteries AAA   |
| Battery life                 | 150 hrs   |
| Dimensions                   | 183 x 90 x 30 mm  |
| Bluetooth <sup>®</sup> range | up to 100 m   |

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#### testo Smart App

The App turns your smartphone/tablet into the display for the testo 115i. Both the operation of the measuring instrument and the display of the readings are achieved by Bluetooth<sup>®</sup> via the testo Smart App on your smartphone or tablet – irrespective of the measuring location. In addition, you can use the App to create measurement reports, add photos and comments to these and send them by e-mail. For iOS and Android.

| Accessories   | Order no. |  |
|---|-----------|--|
| testo Smart Case (refrigeration) for the storage and transport of 2 x testo 115i and 2 x testo 549i, dimensions 250 x 180 x 70 mm                       | 0516 0240 |  |
| testo Smart Case (heating) for the storage and transport of testo 115i, testo 410i, testo 510i, testo 549i and testo 805i, dimensions 250 x 180 x 70 mm |           |  |
| ISO temperature calibration certificate, one-point calibration for clamp thermometer, calibration point +60 °C  |           |  |

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