

The **Testo 550 Digital Manifold** - the Ideal Tool for Servicing and Commissioning Refrigeration Systems and Heat Pumps





# The new Testo 550 Digital Manifold provides high performance at an affordable price. Look at the benefits:

### With the new Testo 550 you can simply switch on, measure and then view the results.

The large LCD display enables you to view precise measurements of critical pressures and temperatures simultaneously. You can also switch the display at the push of a button to show differential temperature between the high and low pressure sides. Additionally you can display calculations for superheat and subcooling. A glance at the instrument display is enough, and you see the results obtained.

Two temperature inputs guarantee you simultaneous calculation and display of superheating and subcooling. At the press of a button, the differential temperatures are also displayed. By simply pressing a button, you can toggle between the measurement values.

### The Testo 550 is an ideal tool for commissioning systems:

- 1. Evacuation of the system is confirmed for you as the instrument displays vacuum values.
- 2. Check for leaks by monitoring pressures and ambient temperatures during a timed tightness test.

This allows you to adjust your system reliably.





### The Testo 550 is uncomplicated, versatile and easy to use

The instrument's operation is intuitive, uncomplicated and easy to use. The large back lit display enables a good clear view even in the dark. Two practical direct buttons offer you

a further advantage – one for the display of MIN/MAX/MEAN, and the other for instant access to 31 selectable refrigerants. Refrigerant flow can be monitored in the integrated sight glass. The three hose holders are used for the easy attachment of the refrigerant hoses to the valve block.





Testo 550 with built-in impact protection

The new Testo 550 has a robust 2-way valve block with 3 connections. The instrument is durable and robust, protected by a purpose designed housing. During measurement, the suspension hook provides secure attachment of the manifold.

Just made for tough applications!





## The new Testo 550 Digital Manifold helps you in your daily work on refrigeration systems and heat pumps...

In service and maintenance and when commissioning systems!



### Measure high and low pressures quickly and precisely

High and low pressure measurements from the condenser and evaporator, are displayed simultaneously.



### Superheating and subcooling

The Testo 550 simultaneously calculates superheating and subcooling.

For example, using the clamp probe for temperature measurements on pipes (a choice of probes are available). It is simply clamped on to the pipe, and quicly records the surface temperature.

You save precious time, because you conveniently measure both temperatures simultaneously!



### Evacuation

The vacuum display is invaluable when evacuating the system, indicating the vacuum reached.



### Tightness tests on systems can be carried out with this new manifold

By measuring the system pressure and the ambient temperature over a defined period, you can make a judgement on the tightness of a system.

This allows you to carry out additional commissioning work reliably with the Testo 550.



### Heat pump mode

There is no longer any need to change the hoses when servicing reversible-cycle air conditioning systems. The Testo 550 Digital Manifold automatically switches over the display of the high and low pressure.



## Overview of the digital manifolds from Testo – the right solution for every application

#### Testo 550

### The tool for robust applications

The Testo 550 is suitable for service, maintenance and commissioning on air conditioning and refrigeration systems and heat pumps:

- Display of MIN/MAX/MEAN
- High quality sensors measure high and low pressure
- Calculation of superheating/ subcooling in real time thanks to up to two external temperature probes
- 2-way valve block with three connections, three hose holders and sight glass
- 31 refrigerants are stored in the instrument
- · Display illumination

#### Instrument functions:

- Heat pump mode
- Temperature-compensated tightness test
- Vacuum display

### Testo 550-1 Set

The digital manifold for service and maintenance including clamp probe, calibration protocol and batteries

Part no. 0563 5505

#### Testo 550-2 Set

The digital manifold for service and maintenance including 2 clamp probes, transport case, calibration protocol and batteries

Part no. 0563 5506



### Testo 556

### The Professional Solution for Service and Maintenance

The Testo 556 is suitable for service and maintenance on air conditioning and refrigeration systems as well as for heat pumps, with extended professional documentation options

#### Additionally to Testo 550:

- · 4-way valve block with sight glass
- 4 temperature connections
- Wireless temperature measurement up to 20 m distance (without obstruction)
- 30 refrigerants are stored in the instrument, more refrigerants by free download from the Testo website
- 60,000 measurement values can be stored, analysis via optional software EasyKool
- Extensive accessories connectable
- Optional: temperature and humidity measurement via wireless probe

### Testo 556-1

The refrigeration system analyser for service and maintenance including calibration protocol and batteries

Part no. 0560 5563

#### Testo 556-2

The refrigeration system analyser for service and maintenance, including calibration protocol and batteries, NH<sub>3</sub> compatible stainless steel design

Part no. 0560 5564



### Testo 560

## The professional solution for commissioning, service and maintenance

The Testo 560 with vacuum cell is suitable for system evacuations. It can also be used for commissioning work.

#### Additionally to Testo 550 and Testo 556:

- Precise vacuum sensor/evacuation
- The sensor measures the absolute pressure and displays the corresponding evaporation temperature of water
- The vacuum cell is protected from too high pessures by a special valve
- Optional: temperature and humidity measurement via wireless probes

### Testo 560-1

The refrigeration system analyser for service, maintenance and commissioning including calibration protocol and batteries

Part no. 0560 5603

#### Testo 560-2

The refrigeration system analyser for service and maintenance including claibration protocol and batteries  ${
m NH_3}$  compatible stainless steel design.

Part no. 0560 5604





### Accessories for the Testo 550, 556, 560 Manifolds

Probes	Illustration		Meas. range	Accuracy		Part no.		
Clamp probe for pipes from Ø 6 mm to Ø 35 mm, NTC	<b>∞</b> 0		-40 to +125 °C	±1 °C (-20 to +85 °C)		0613 5505		
Pipe wrap probe with Velcro for pipe diameter to max. 75 mm, Tmax. +75°C, NTC	300 mm Conn.: Fixed cable 1.5 m	30 mm	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C		0613 4611		
Waterproof NTC surface probe for flat surfaces	Conn.: Fixed cable 1.3 mm  115 mm  5 mm	50 mm	-50 to +150 °C Long-term meas. range +125 °C, short-term +150 °C (2 minutes)	±0.5% of mv (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)		0613 1912	,	
Efficient, robust NTC air probe	Conn.: Fixed cable 1.2 m	50 mm	-50 to +125 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining range)		0613 1712		
Transport case, provides space for the testo 550, probes and hoses	Illustration may differ from original	inal				0516 5505	)	
Probes and accessories for	or Testo 556 and Testo 560							
Probes	Illustration		Meas. range	Accuracy	t <sub>99</sub>	Part no.		
Pipe wrap probe with Velcro for pipes from Ø 6 mm to Ø 120 mm, Pt 100, 2.9 m cable length	450 mm	20 mm	-100 to +400 °C	Class B	90 s	0609 5602		
Efficient, robust air probe, Pt100	Fixed cable2 m	50 mm	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range)	70 s	0609 1773		
Pipe wrap probe for pipe diameter 5 to 65 mm	Fixed cable		-50 to +120 °C	Class B	5 s	0609 5605		
Radio module for upgrading measuring instrument with radio option (Country versions)				Radio freg.		Part no.		
Radio module for measuring instrument, 869.85 MHz, approval for the countries: DE, FR, UK, BE, 869.85 MHz				869.85 MHz F	SK	0554 0188	,	
NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL 915.					SK	0554 0190	)	
Radio probes including humidity probe head			Meas. range	Accuracy		Resolution		
Radio handle for attachable probe heads with humidity probe head			0 to +100 %RH -20 to +70 °C	±2 %RH (+2 to +98 %RH) ±0.5 °C		0.1 %RH 0.1 °C		
Country versions				Radio freq.		Part no.		
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, B NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO			=,	869.85 MHz F	SK	0554 0189	)	
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL				915.00 MHz F	SK	0554 0191		
Humidity probe head, attachable to r	adio handle					0636 9736	;	
Radio probes: General technical	data							
Battery type 2 x 3V butto	Radio immersion/penetration probe, NTC Radio handgrip  2 x 3V button cell (CR 20 32) AAA micro batteries  150 h (meas. rate 0.5 s) 2 months (meas. rate 10 s)  Radio handgrip  2 to 32 AAA micro batteries  6 months (meas. rate 0.5 s) 6 months (meas. rate 10 s)		Measuring rate 0.5 s or 10 s, adjustable on handle		nandle <u>tra</u>	idio nsmission per. temp.	Unidirection -20 to +50 °C	
			Radio coverage	Up to 20 m (wit obstructions)	hout St	orage temp.	-40 to +70 °C	
Cable probes for Testo 556 and Testo 560			Meas. range	Accuracy		Part no.		
Current probe for measuring current consumption of compressors, with switchable measuring range			0 to 20/200 A	10 to 40 0 A 20/		0554 5607 Conn.: Fixed	d cable 2.9 m	
Oil pressure probe for checking oil level in the			0 to 25 bar rel	1,5 % of fsv		0638 1742		
compressor				Overload: 50 har		Conn.: Fixed cable 2.9 m		
Scales incl. transport case and batteries (0 to 80 kg), incl. data cable, directly connectable to testo 556/560, overload 120 kg, resolution: 0.01 kg						0554 5606		
Accessories for Testo 556 and Testo 560						Part no.		
USB connection cable instrument-PC						0449 0047		
"EasyKool" software with measurement data management, USB data cable included						0554 5604		
Testo fast printer with wireless infrared interface, 1 roll thermal paper and 4 AA batteries						0554 0549		
<u> </u>	Spare thermal paper for printer (6 rolls), measurement data documentation legible for up to 10 years						0554 0568	



### Technical data

	Testo 550	Testo 556	Testo 560			
Operating temperature	-10 to +50 °C	-20to +60 °C				
Storage temperature	-20 to +60 °C					
Display	LCD					
Battery life	40h (without illumination)					
Dimensions	200 x 113 x 62 mm	260 x 130 x 70 mm				
Weight	1060 g	1400 g				
Pressure media	CFC, HFC, N, H <sub>2</sub> O	FCKW, FKW, N, H <sub>2</sub> O, CO <sub>2</sub> , (stainelss steel versions: NH <sub>3</sub> )				
Low pressure <sub>rel.</sub> (LP) High pressure <sub>rel.</sub> (HP)	40 bar / 40 bar	25 bar / 50 bar				
Overload <sub>rel.</sub> (LP/HP)	60 bar / 60 bar	50 bar / 100 bar				
Accuracy (at +22 °C)	±0.75 % fs (±1 digit)	±0.5% fs (Class 0.5) (±1 digit)				
Connections	3 x 7/16"-UNF	3 x 7/16" UNF 1 x 5/8" UNF				
Vacuum <sub>abs</sub>	Vacuum display		0 to 200 hPa			
Overload vacuum <sub>abs</sub>			3 bar/Sensor protected from high pressures			
Temperature						
Measuring range	-50 to +150 °C	-100 to +200 °C				
Accuracy (at +22 °C)	±0.5 K (±1 digit)	Class B ±(0,3 +0,005 tl)				
Resolution		0.1 °C				
Probe connections	2 x plug-in (NTC)	2 x plug-in and 2 x wireless				
Humidity						
Measuring range		0 to 100 %RH				
Probe connections		1 x wireless				
Refrigerants in instrument	R12, R22, R123, R134a, R290, R401A, R401B, R402A, R402B, R404A, R406A, R407A, R407C, R408A, R409A, R410A, R414B, R416A, R417A, R420A, R421A, R421B, R422A, R422B, R422D, R424A, R434A, R437A, R502, R503, R507, R718	R12, R1270, R134a, R22, R23, R290, R401A, R401B, R401C, R402A, R402B, R403B, R404A, R406a*, R407A, R407B, R407C, R407D, R408A, R409A, R410A, R413A, R414b*, R417A, R422a*, R500, R502, R507, R508**, R717**, R723**, R744, R718  *only in –1 version (brass) **only in –2 version (stainless steel)  (more refrigerants can be downloaded free of charge from the Testo website free of charge from the Testo website				
Documentation						
Printer	IR printer					
Data store in instrument		60,000	60,000 readings			



Saves you a lot of time!



### Order sets

### Assembled for you:

### Testo 550-1 Set

Testo 550 Digital Manifold

Clamp probe for temperature measurements on pipes

Calibration protocol and batteries

Part no. 0563 5505



### Testo 550-2 Set

Testo 550 Digital Manifold

2 clpmp probes for temperature measurements on pipes

Calibration protocol and batteries

Transport case







testo Ltd. Newman Lane, Alton, Hants, GU34 2QJ

Tel: 01420 544 433 Fax: 01420 544 434 Email: info@testo.co.uk www.testo.co.uk/550