

# Measurement data monitoring system

### testo Saveris

Automated and uninterrupted measurement data recording

Flexible system set-up with wireless or Ethernet probes in many probe versions

Extensive alarm management

Automatic creation of measurement data reports

Integration of other further measurement parameters via standard interfaces



The measurement data monitoring system testo Saveris monitors temperature and humidity values without interruption in wide-ranging measurement sites. Wireless and Ethernet probes allow versatile applications:

- Monitoring and documentation in Production, Quality Assurance and R & D
- Monitoring of the storage climate of valuable inventory, medicaments and foods
- Monitoring of the food cold chain

The Base is the heart of testo Saveris and can store 40,000 measurement values. The large selection of wireless probes allows a practically unlimited versatility of application. The existing LAN structure can be used with the Ethernet probes. The Router improves wireless connection in unfavourable constructional situations. By connecting a Converter to an Ethernet socket, the signal from a wireless probe can be converted to an Ethernet signal.

### testo Saveris system overview

### testo Saveris wireless probes

Probe versions with internal as well as external temperature and humidity sensors allow the adaptation to any application. The wireless probes are available optionally with or without display. The current measurement data, the battery status and the quality of the wireless connection are shown.

#### testo Saveris Router

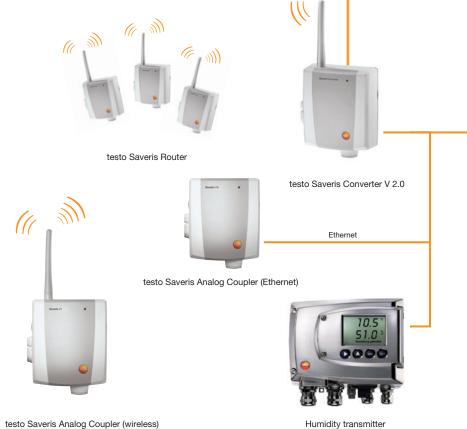
The use of a Router can improve or extend the wireless connection in difficult constructional circumstances. Several Routers in the testo Saveris system are of course possible. At the same time, the serial switching of up to 3 Routers V 2.0 provides the highest level of flexibility regarding wireless range.

### testo Saveris Converter

By connecting a testo Saveris Converter to an Ethernet socket, the signal from a wireless probe can be converted into an Ethernet signal. This combines the flexible installation of a wireless probe with the exploitation of the existing Ethernet even over long transmission distances.



testo Saveris wireless probes



testo Saveris Analog Coupler (wireless)

testo Saveris Analog Coupler

The two versions of the Analog Coupler (wireless/Ethernet) allow the integration of further measurement parameters into the testo Saveris monitoring system, by including all transmitters with standardized current/voltage interfaces, e.g. 4 to 20 mA or 0 to 10 V.

### Humidity and differential pressure transmitters testo 6651/6681/6351/6381/6383

The integration of the humidity and differential pressure transmitters allows control parallel to the measurement data monitoring. This offers the solution for highest accuracy as well as for special applications (high humidity, trace humidity etc.) in compressed air, drying and air conditioning technology.

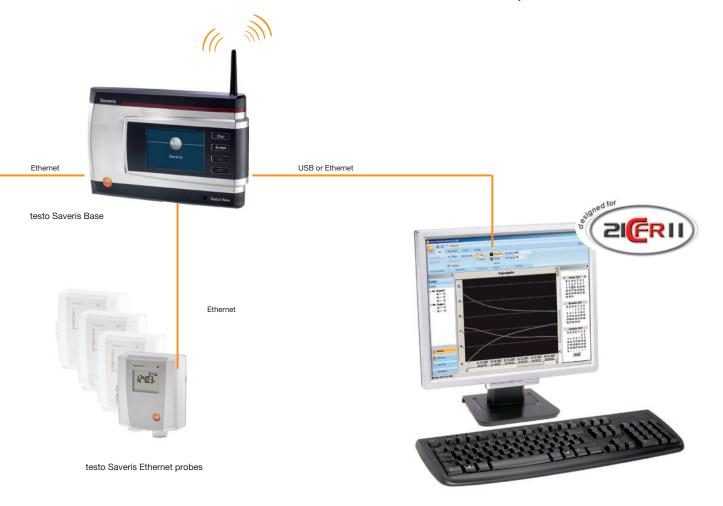


### testo Saveris Base

The Base is the heart of testo Saveris, and can store 40,000 measurement values per measurement channel independently of a PC. This corresponds to a storage capacity of approximately a year at a measurement rate of 15 minutes. System data and alarms are visible via the testo Saveris Base display.

### testo Saveris software

All temperature and humidity values are collated and documented without interruption here. Depending on requirements, the software is available in three versions: as a basic version SBE (Small Business Edition), as an extended version PROF (Professional), or as a validatable CFR version. Operation is easy thanks to an intuitive user interface. And to round it all off, you can view the measurement data flexibly on various mobile end devices.



testo Saveris software

#### testo Saveris Ethernet probes

In addition to the wireless probes, probes can be used which can be directly connected to the Ethernet. This means that an existing LAN structure can be used, allowing the data transfer from probe to Base even over large distances.



# Ordering data / Technical data



No mains units or aerials with magnetic base are contained in this ordering data. Note on the radio frequencies: 2.4 GHz: non-EU countries

#### testo Saveris Base

Memory	40,000 values per channel (total max. 18,000,000 values)
Dimensions	225 x 150 x 49 mm
Weight	Approx. 1510 g
Protection class	IP42
Housing material	Diecast zinc / plastic
Radio frequency	2,4 GHz
Power supply (absolutely necessary)	6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, power consumption 4 W
Rech. batt.*	Li-ion battery (for data back-up and for emergency SMS if power supply fails)
Operating temperature	+5 to +45 °C
Storage temperature	-25 to +60 °C
Display	graphical display, 4 control keys
Interfaces	USB, radio, Ethernet
Connectable radio probe	max. 15 probes can be directly connected via wireless interface, max. 150 total via wireless Router / Converter / Ethernet / Extender, max. 450 channels
Alarm relay	max. 1 A, max. 30 W, max. 60/25 V DC/AC, NC or NO contact
GSM module**	850 / 900 / 1800 / 1900 MHz not valid for Japan and South Korea
Set up	Table base and wall bracket included
Firmware version	2.X

\*Wearing part \*\* According to R&TTE - EN 301 511 (900/1800)



### **Router and Converter**

Part no.

esto Saveris Router V 1.0, 2.4 GHz, radio transmission medium	0572 0159
testo Saveris Router V 2.0, 2.4 GHz, radio transmission medium	0572 0259
testo Saveris Converter V 1.0, 2.4 GHz, converts the radio transmission medium to Ethernet	0572 0158
testo Saveris Converter V 2.0, 2.4 GHz, converts the radio transmission medium to Ethernet	0572 0258

Technical data	testo Saveris Router V 1.0	testo Saveris Router V 2.0	testo Saveris Converter V 1.0	testo Saveris Converter V 2.0	
Application	<ul> <li>for testo Saveris Base</li> <li>Firmware Version V 1.X</li> </ul>	<ul> <li>for testo Saveris Base</li> <li>Firmware Version V 2.X</li> </ul>	<ul> <li>for testo Saveris Base</li> <li>Firmware Version V 1.X</li> <li>only for wireless probes</li> <li>Firmware Version 1.X</li> </ul>	<ul> <li>for all testo Saveris Base Firmware versions</li> <li>only for wireless probes with Firmware Version 2.X</li> </ul>	
Dimensions		Approx. 85 :	x 100 x 38 mm		
Weight	Appro	ox. 180 g	Appro	x. 190 g	
Power supply		ively via 24 V AC/DC plug-in/ r consumption < 0.5 W	6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/scre terminals, PoE, power consumption < 2 W		
Operating temperature		-20 to	o +50 °C		
Storage temperature		-40 to	0 +60 °C		
Housing material		PI	astic		
Protection class		II	P54		
Interfaces	R	adio	Radio, Ethernet		
Connectable radio probe	m	ax. 5	ma	x. 15	
Router cascading	no	yes			
Wall bracket	included				



# Radio probes

ersion without display	Part no.
testo Saveris T1 Radio probe with internal NTC, radio frequency 2.4 GHz, without display	0572 1250*
testo Saveris T2 Radio probe with external probe connection and internal NTC, door contact, radio frequency 2.4 GHz, without display	0572 1251*
testo Saveris T3 2-channel radio probe with 2 external TC probe connections (choice of TC characteristics), radio frequency 2.4 GHz, without display	0572 9252*
testo Saveris Pt Radio probe with 1 external Pt100 probe connection, radio frequency 2.4 GHz, without display	0572 7251*

#### Version with display

testo Saveris T1 D Radio probe with internal NTC, radio frequency 2.4 GHz, with display	0572 1260*	
testo Saveris T2 D Radio probe with external probe connection and internal NTC, radio frequency 2.4 GHz, with display	0572 1261*	
testo Saveris T3 D 2-channel radio probe with 2 external TC probe connections (choice of TC characteristics), radio frequency 2.4 GHz, with display	0572 9262*	
testo Saveris Pt D Radio probe with 1 external Pt100 probe connection, radio frequency 2.4 GHz, with display	0572 7261*	

The alkali manganese batteries AA (0515 0414) are included in these ordering data (Analog Coupler excluded). testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

Protection classIP68IP54IP68Radio frequency2,4 GHzMeasuring rateStandard 15 min, 1 min to 24 h can be setMemory6,000 measurement values per channelConformity with standardsDIN EN 12830Operating temperature-35 to +50 °CStorage temperature-40 to +55 °C (incl. batteries)Display (optional)LCD, 2 lines; 7-segment with symbols	Technical data	testo Saveris T1	testo Saveris T2	testo Saveris T3	testo Saveris Pt	
Image: Properties         ±0.4 °C (+28 to +50 °C) ±0.8 °C (remaining range) ±0.8 °C (remaining range) ±0.8 °C (remaining range) Probe type         Image: Probe type         Image: Probe type         Image: Probe type         Image: Probe type         Probe typ	Probe type	NTC	NTC	-	-	
k         curacy         ±0.4 °C (+28 to +50 °C) ±0.8 °C (remaining range) ±0.8 °C (remaining range) ±0.8 °C (remaining range) Probe type         n         n         n           Probe type         0.1 °C         1°C (25 to +50 °C) ±0.8 °C (remaining range) (instrument)         NTC         TC type K TC type J TC type T TC type S TC type T TC type S 200 to +400 °C         200 to +600 °C           Measuring range (instrument)         -         -         -         -         -           Measuring range (instrument)         -         -         TC type T TC type S TC type T TC type S 200 to +400 °C         -         -         -           Measuring range (instrument)         -         -         -         -         -         -           Measuring range (instrument)         -	Measuring range	-35 to +50 °C	-35 to +50 °C	-	-	
Probe type-NTCTC type KTC type JPt100Measuring range (Instrument)50 to +150 °C-195 to +1350 °C -100 to +750 °C TC type T-200 to +600 °CMeasuring range (Instrument)- $\pm 0.2 °C (.25 to +70 °C)$ $\pm 0.4 °C (remaining range)\pm 0.5 °C \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.1 °C (10 to \pm 200 °C)\pm 0.5 °C \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.1 °C (10 to \pm 200 °C)\pm 0.5 °C \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.1 °C (10 to \pm 200 °C)\pm 0.5 °C \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.1 °C (10 to \pm 200 °C)\pm 0.5 °C \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.1 °C (10 to \pm 200 °C)\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.1 °C (10 to \pm 200 °C)\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.1 °C (10 to \pm 200 °C)\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.1 °C (10 to \pm 200 °C)\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 25 °C\pm 0.5 °C 0 \text{ or } 0.5\% \text{ of } m.v.at \pm 1000 \text{ via mini-DIN socket}difference in potential 2 V\pm 0.5 °C 0 \text{ or } 0.5\%  $				-	-	
Measuring range (Instrument)       -       -50 to +150 °C       -195 to +1350 °C -100 to +750 °C       -200 to +600 °C         Term       Curracy (Instrument)       -       -50 to +150 °C       -195 to +1350 °C -100 to +750 °C       -200 to +400 °C 0 to +1760 °C         Resolution (Instrument)       -       ±0.2 °C (-25 to +70 °C) ±0.4 °C (remaining range)       ±0.5 °C or 0.5% of m.v. ±0.1 °C (0 to +60 °C) ±0.2 °C (100 to +200 °C) ±0.5 °C (remaining range)         Resolution (Instrument)       -       0.1 °C       0.1 °C (remaining range)       195 to +1350 °C -100 to +200 °C (remaining range)         Dimensions (housing):       -       0.1 °C       0.1 °C (remaining range)       1 P100 via mini-DIN socket, door contact connection cable included in delivery (rbe it AA batteries)       1 P100 via mini-DIN socket         Measuring raterial       -       0.1 °C       3 vars vith L91 Photo lithium Energizer batteries         Housing material       Plattery life at +25 °C, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries       Plattery life at +25 °C, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries         Housing material       Plattery life at +25 °C       -       -       -         Operating temperature       -       -       -       -       -         Operating temperature       -35 to +50 °C       -       -       -       - <td>Resolution</td> <td>0.1 °C</td> <td>0.1 °C</td> <td>-</td> <td>-</td>	Resolution	0.1 °C	0.1 °C	-	-	
Iteration       TC type T       TC type S         -200 to +400 °C       0 to +400 °C       0 to +1760 °C         Accuracy (Instrument)       -       ±0.2 °C (-25 to +70 °C)) ±0.4 °C (remaining range)       ±0.5 °C or 0.5% of m.v. ±0.5 °C or 0.5% of m.v. ±0.5 °C (remaining range)       ±125 °C (-100 to +200 °C) ±0.5 °C (remaining range)         Resolution (Instrument)       -       0.1 °C       0.1 °C/TC type S 1 °C       0.01 °C         Connection       -       NTC via mini-DIN socket, door contact connection cable included in delivery (180 m)       2 TCs via TC socket, max. difference in potential 2 V       1 Pt100 via mini-DIN socket difference in potential 2 V         Dimensions (housing):       80 x 85 x 38 mm       1 Pt100 via mini-DIN socket door contact connection cable included in delivery (180 m)       3 vars; for freezer applications, 3 years with L91 Photo lithium Energizer batteries (Type: 4 Ab batteries)         Protection class       IP68       IP54       IP68         Radio frequency       2,4 GHz       4         Memory       6,000 measurement values per channel       -         Conformity with standards       DIN EN 12830       -         Operating temperature       -35 to +50 °C       -20 to +50 °C         Operating temperature       -35 to +50 °C       -20 to +50 °C         Display (optional)       LCD, 2 lines; 7-segment with symbols	Probe type	-	NTC	TC type K TC type J	Pt100	
Product of the second secon		-	-50 to +150 °C	TC type T TC type S	-200 to +600 °C	
Connection       -       NTC via mini-DIN socket, door contact connection cable included in delivery (1.80 m)       2 TCs via TC socket, max. difference in potential 2 V (1.80 m)       1 Pt100 via mini-DIN socket         Dimensions (housing):       80 x 85 x 38 mm       2 TCs via TC socket, max. difference in potential 2 V (1.80 m)       1 Pt100 via mini-DIN socket         Weight       Approx. 240 g       Battery life       Battery life at +25 °C, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries         Housing material       Plastic         Protection class       IP68       IP54       IP68         Radio frequency       2,4 GHz       Measuring rate       Standard 15 min, 1 min to 24 h can be set         Memory       6,000 measurement values per channel       -       -         Operating temperature       -35 to +50 °C       -20 to +50 °C       -         Storage temperature       -40 to +55 °C (incl. batteries)       Display (optional)       LCD, 2 line; 7-segment with symbols         Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz       approx. 100 m w/o obstruction at frequency 2.4 GHz		-		±0.5 °C or 0.5% of m.v.	±0.1 °C (0 to +60 °C) ±0.2 °C (-100 to +200 °C)	
door contact connection cable included in delivery (1.80 m)difference in potential 2 VDimensions (housing):80 x 85 x 38 mmWeightApprox. 240 gBattery life (Type: 4 AA batteries)Battery life at +25 °C, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries (Type: 4 AA batteries)Housing materialPlasticProtection classIP68Radio frequency2,4 GHzMeasuring rateStandard 15 min, 1 min to 24 h can be setMemory6,000 measurement values per channelConformity with standardsDIN EN 12830Operating temperature-35 to +50 °CStorage temperature-40 to +55 °C (incl. batteries)Display (optional)LCD, 2 lines; 7-segment with symbolsTransmission distanceapprox. 100 m w/o obstruction at frequency 2.4 GHz	Resolution (Instrument)	-	0.1 °C	0.1 °C/TC type S 1 °C	0.01 °C	
Weight       Approx. 240 g         Battery life (Type: 4 AA batteries)       Battery life at +25 °C, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries (Type: 4 AA batteries)         Housing material       Plastic         Protection class       IP68         Radio frequency       2,4 GHz         Measuring rate       Standard 15 min, 1 min to 24 h can be set         Memory       6,000 measurement values per channel         Conformity with standards       DIN EN 12830         Operating temperature       -35 to +50 °C         -40 to +55 °C (incl. batteries)       Display (optional)         LCD, 2 lines; 7-segment with symbols       Transmission distance	Connection	-	door contact connection cable included in delivery		1 Pt100 via mini-DIN socket	
Battery life       Battery life at +25 °C, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries         (Type: 4 AA batteries)       Plastic         Housing material       Plastic         Protection class       IP68       IP54       IP68         Radio frequency       2,4 GHz       Measuring rate       Measuring rate       Standard 15 min, 1 min to 24 h can be set         Memory       6,000 measurement values per channel       Conformity with standards       DIN EN 12830       -         Operating temperature       -35 to +50 °C       -20 to +50 °C       Storage temperature       -20 to +50 °C         Display (optional)       LCD, 2 lines; 7-segment with symbols       Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz	Dimensions (housing):		80 x 85	5 x 38 mm	1	
(Type: 4 AA batteries)       Plastic         Housing material       Plastic         Protection class       IP68       IP54       IP68         Radio frequency       2,4 GHz       Measuring rate       Measuring rate       Standard 15 min, 1 min to 24 h can be set         Memory       6,000 measurement values per channel       Conformity with standards       DIN EN 12830       -         Operating temperature       -35 to +50 °C       -20 to +50 °C       -         Storage temperature       -40 to +55 °C (incl. batteries)       Display (optional)       LCD, 2 lines; 7-segment with symbols         Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz       -	Weight		Appro	ox. 240 g		
Protection classIP68IP54IP68Radio frequency2,4 GHzMeasuring rateStandard 15 min, 1 min to 24 h can be setMemory6,000 measurement values per channelConformity with standardsDIN EN 12830Operating temperature-35 to +50 °CStorage temperature-40 to +55 °C (incl. batteries)Display (optional)LCD, 2 lines; 7-segment with symbolsTransmission distanceapprox. 100 m w/o obstruction at frequency 2.4 GHz		Battery life at +25 °	C, 3 years; for freezer application	ons, 3 years with L91 Photo lith	ium Energizer batteries	
Radio frequency       2,4 GHz         Measuring rate       Standard 15 min, 1 min to 24 h can be set         Memory       6,000 measurement values per channel         Conformity with standards       DIN EN 12830         Operating temperature       -35 to +50 °C         Conformity with standards       -20 to +50 °C         Operating temperature       -40 to +55 °C (incl. batteries)         Display (optional)       LCD, 2 lines; 7-segment with symbols         Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz	Housing material		P	astic		
Measuring rate       Standard 15 min, 1 min to 24 h can be set         Memory       6,000 measurement values per channel         Conformity with standards       DIN EN 12830       -         Operating temperature       -35 to +50 °C       -20 to +50 °C         Storage temperature       -40 to +55 °C (incl. batteries)         Display (optional)       LCD, 2 lines; 7-segment with symbols         Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz	Protection class	I	P68	IP54	IP68	
Memory       6,000 measurement values per channel         Conformity with standards       DIN EN 12830         Operating temperature       -35 to +50 °C         Storage temperature       -40 to +55 °C (incl. batteries)         Display (optional)       LCD, 2 lines; 7-segment with symbols         Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz	Radio frequency		2,4	4 GHz		
Conformity with standards       DIN EN 12830       -         Operating temperature       -35 to +50 °C       -20 to +50 °C         Storage temperature       -40 to +55 °C (incl. batteries)         Display (optional)       LCD, 2 lines; 7-segment with symbols         Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz	Measuring rate		Standard 15 min, 1	min to 24 h can be set		
Operating temperature    35 to +50 °C    20 to +50 °C       Storage temperature    40 to +55 °C (incl. batteries)       Display (optional)     LCD, 2 lines; 7-segment with symbols       Transmission distance     approx. 100 m w/o obstruction at frequency 2.4 GHz	Memory		6,000 measureme	nt values per channel		
Storage temperature       -40 to +55 °C (incl. batteries)         Display (optional)       LCD, 2 lines; 7-segment with symbols         Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz	Conformity with standards	Is DIN EN 12830 -				
Display (optional)       LCD, 2 lines; 7-segment with symbols         Transmission distance       approx. 100 m w/o obstruction at frequency 2.4 GHz	Operating temperature	-35 to	o +50 °C	-20 to	o +50 °C	
Transmission distance approx. 100 m w/o obstruction at frequency 2.4 GHz	Storage temperature		-40 to +55 °C	C (incl. batteries)		
	Display (optional)		LCD, 2 lines; 7-se	egment with symbols		
Wall bracket included	Transmission distance		approx. 100 m w/o obstr	uction at frequency 2.4 GHz		
	Wall bracket		inc	luded		

\* The testo Saveris Converter V 2.0 (order no. 0572 0258) is required for integration of testo Saveris wireless probes into systems with Base Firmware V 1.X . For more information please contact our customer hotline or your Testo partner.



### **Radio probes**

ersion without o	lisplay	Part no.
testo Saveris H3	Wireless probe with internal humidity sensor 3% RH, radio frequency 2.4 GHz, without display	0572 6250*
testo Saveris U1	Wireless Analog Coupler with 1 current/voltage input, radio frequency 2.4 GHz, without display	0572 3250*
,		
•		0572 6262*
	lay D Wireless probe with external humidity sensor 2%RH, radio frequency 2.4 GHz, with display D Wireless probe with internal humidity sensor 3% RH, radio frequency 2.4 GHz, with display	0572 6262*

The alkali manganese batteries AA (0515 0414) are included in these ordering data (Analog Coupler excluded). testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

Technical data	test	o Saveris	H2 D	testo Saveris H3 D testo Saveris H4 D				testo Saveris U1	
Probe type			_	NTC	Humidity sensor	-		1 channel: current/voltage input	
Measuring rang	e		-	-20 to +50 °C	0 to 100 %RH <sup>1)</sup>			2-wire: 4 to 20 mA, 4-wire: 0/4 to 20 mA, 0 to 1/5/10 V, load: max. 160 $\Omega$ at 24 V DC	
Measuring rang Accuracy			-	±0.5 °C	±3 %RH at +25 °C ±0,03 %RH/K ±1 digit	-		Current ±0.03 mA / 0.75 µA Voltage 0 to 1 V ±1.5 mV/39 µV Voltage 0 to 5 V ±7.5 mV / 0.17 mV Voltage 0 to 10 V ±15 mV / 0.34 mV ±0.02% of .m/K deviating from nominal temperature 22 °C	
Resolution			-	0.1 °C	0.1 °C / 0.1 °C td		-	-	
Probe type	NTC	;	Humidity sensor		-	NTC	Humidity sensor		
Measuring rang (Instrument)	e -20 t	to +50 °C	0 to +100 %RH <sup>1)</sup>		-	-20 to +70 °C	0 to +100 %RH <sup>1)</sup>	-	
Accuracy (Instrument)	±0.5	°C	to 90 %RH: ±2 %RH at +25 °C > 90 %RH: ±3 %RH at +25 °C ±0,03 %RH/K ±1 digit		-	±0.2 °C see probes		-	
Resolution (Instru	iment) 0,10	.1 °C	0.1% / 0.1 °C td		-	0,10.1 °C	0.1% / 0.1 °C td	-	
Connection	non- prob		able stump	<ul> <li>1 x external humidity probe mini DIN socket</li> </ul>		2 or 4-wire current/ voltage output Service interface mini DIN for adjustment			
Dimensions (housin	g):	85 x 100	x 38 mm		80 x 85	x 38 mm		Approx. 85 x 100 x 38 mm	
Weight		Approx	k. 256 g		Approx	k. 245 g		Approx. 240 g	
Battery life (Type: 4 AA batterie	es)	Batt			reezer application nergizer batterie	cations, 3 years with L91 Supply: Mains unit 6.3 V teries to 30 V DC max. 25 V			
Housing material					PI	astic			
Protection class		IP	54	IF	P42		I	P54	
Radio frequency					2,4	GHz			
Measuring rate				Star	ndard 15 min, 1	min to 24 h can	be set		
Memory				6,0	000 measuremer	nt values per ch	annel		
Operating temperat	ure				-20 to	o +50 °C			
Storage temperatur	e				-40 to +55 °C	(incl. batteries)			
Display (optional)			LCD	, 2 lines; 7-seg	ment with symb	ols		(no display)	
Transmission distar	nce			approx. 1	100 m w/o obstru	uction at freque	ncy 2.4 GHz	1	
Wall bracket					inc	luded			

<sup>1)</sup> Not for condensing atmosphere. For continuous applications in high humidity (>80 %RH at ≤30 °C for >12 h, >60 %RH at >30 °C for >12h), please contact us via www.testo.com. \* The testo Saveris Converter V 2.0 (order no. 0572 0258) is required for integration of testo Saveris wireless probes into systems with Base Firmware V 1.X . For more information please contact our customer hotline or your Testo partner.



# **Ethernet probes**

Version with display	Part no.
testo Saveris T1 E Ethernet probe with 1 external probe connection NTC, with display	0572 1191
testo Saveris T4 E 4-channel Ethernet probe with 4 external TC probe connections, with display	0572 9194
testo Saveris Pt E Ethernet probe with external Pt100 probe connection, with display	0572 7191

Mains units are not included in delivery. testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

Technical data	testo Saveris T1 E	testo Saveris T4	E	testo Saveris Pt E
Probe type	NTC	TC type K	TC type J	Pt100
Measuring range	-50 to +150 °C	-195 to +1350 °C	-100 to +750 °C	-200 to +600 °C
(Instrument)		TC type T	TC type S	
bro		-200 to +400 °C	0 to +1760 °C	_
Accuracy (Instrument)	±0.2 °C (-25 to +70 °C) ±0.4 °C (remaining range)	±0.5 °C or 0.5% of	m.v.	at +25 °C ±0.1 °C (0 to +60 °C) ±0.2 °C (-100 to +200 °C) ±0.5 °C (remaining range)
Resolution (Instrument)	0.1 °C	0.1 °C / TC type S	1 °C	0.01 °C
Connection	1 x NTC via mini DIN socket	4 TCs via TC socker in potential 50 V	et, max. difference	1 Pt100 via mini-DIN socket
	Mini-	DIN service interface for a	djustment is access	ible externally
Dimensions (housing):		Approx. 85	x 100 x 38 mm	
Weight		Appro	ox. 220 g	
Power	6.3 V DC ma	ins unit; alternatively via 2	24 V AC/DC plug-in/s	screw terminals, PoE
Buffer battery		Li-ion (w	earing part)	
Housing material		P	astic	
Protection class		I	P54	
Measuring rate		2 s	to 24 h	
Memory		6,000 measureme	nt values per channe	ł
Operating temperature		+5 tc	+45 °C	
Storage temperature		-25 to	o +60 °C	
Power consumption		PoE Class 0	(typical $\leq$ 3 W)	
Display		LCD, 2 lines; 7-se	gment with symbols	;
Wall bracket		inc	luded	



0572 6192

0572 6194

### **Ethernet probes**

testo Saveris H2 E Ethernet probe 2 %RH, with display

testo Saveris H4 E Ethernet probe with external humidity probe connection, with display

Version without display	Part no.	
testo Saveris U1 E Ethernet analog coupler with 1 curent/voltage input, without display	0572 3190	
Version with display		
testo Saveris H1 E Ethernet probe 1 %RH, with display	0572 6191	

Mains units are not included in delivery. testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

Technical data	testo Saveris	H1 E	testo Saveris	H2 E	testo Saveris	H4 E	testo Saveris U1 E
Probe type		-		-		-	1 channel: current/voltage
Measuring range		-		-		-	2-wire: 4 to 20 mA, 4-wire: 0/4 to 20 mA, 0 to 1/5/10V, load: max. 160 $\Omega$ at 24 V DC
Accuracy		_		_		_	$\begin{array}{l} \mbox{Current $\pm 0,03$ mA / 0.75$ $\mu A$ \\ \mbox{Voltage 0 to 1 V $\pm 1.5$ mV / 39$ $\mu V$ \\ \mbox{Voltage 0 to 5 V $\pm 7.5$ mV / 0.17$ mV \\ \mbox{Voltage 0 to 1 V $\pm 1.5$ mV / 0.34$ mV \\ \mbox{\pm 0.02\% of. m.v./K deviating from} \\ \mbox{nominal temperature 22 °C} \end{array}$
Probe type	NTC	Humidity sensor	NTC	Humidity sensor	NTC	Humidity sensor	-
Measuring range (Instrument) Accuracy	-20 to +70 °C	0 to 100 %RH <sup>1)</sup>	-20 to +70 °C	0 to 100 %RH <sup>1)</sup>	-20 to +70 °C	0 to 100 %RH <sup>1)</sup>	-
Accuracy (Instrument)	±0.2 °C (0 to +30 °C) ±0.5 °C (remaining range)	to 90 %RH: ±1 %RH +0,7 % of m.v. at +25 °C > 90 %RH: ±1,4 %RH +0,7 % of m.v. ±0,03 %RH/K ±1 digit	±0.5 °C	to 90 %RH: ±2 %RH at +25 °C > 90 %RH: ±3 %RH at +25 °C ±0,03 %RH/K ± 1 digit	±0.2 °C	see external probes	-
Resolution (Instrument)	0.1 °C	0.1% / 0.1 °C td	0.1 °C	0.1% / 0.1 °C td	0.1 °C	0.1% / 0.1 °C td	-
Connection		-	-	1 x external Ethernet humidity probe mini DIN socket			1 x 2- or 4-wire current/voltage
			Mini-DI	V service interfa	ce is accessible	externally	
Dimensions (housing):				Approx. 85 x	100 x 38 mm		
Weight		Approx	. 230 g		Appro	x. 254 g	Approx. 240 g
Power		6.3	V DC mains un	it; alternatively v	via 24 V AC/DC	plug-in/screw te	erminals, PoE
Buffer battery				Li-ior	n (wearing part)		
Housing material				PI	astic		
Protection class				ll	<b>&gt;</b> 54		
Measuring rate				2 s t	o 24 h		
Memory			6,0	000 measuremer	nt values per ch	annel	
Operating temperature		+5 to +45 °C					
Storage temperature				-25 to	0° 00+ 0		
Power consumption				PoE Class 0	(typical $\leq$ 3 W)		
Display		LCD	), 2 lines; 7-seg	ment with symb	ols		no display
Wall bracket				inc	luded		1

<sup>1)</sup> Not for condensing atmosphere. For continuous applications in high humidity (>80 %RH at <30 °C for >12 h, >60 %RH at >30 °C for >12h), please contact us via www.testo.com.

#### Sintered caps for testo Saveris H1 E, H2 E and H2 D probes

0554 0755	
0554 0641	
0554 0757	
0554 0756	
0554 0660	
	0554 0641 0554 0757 0554 0756



# External temperature and humidity probes

Probe type	Dimensions Probe shaft/probe shaft tip		easuring nge	Accuracy	<b>t</b> <sub>99</sub>	Part no.
Pt100						
Robust, Pt100 stainless steel food probe (IP65)	04 mm Connection: Fixed cable	13 11111	0 to 00 °C	Class A (-50 to +300 °C), Class B (remaining range)	10 s	0609 2272
Penetration probe Pt100 with ribbon cable, cable length 2 m, IP 54	60 mm Ø 5 mm	30 11111	5 to 50 °C	Class A	35 s	0572 700
Connection cable for unlimited Pt10 possible max. cable length: 20 m	0 stationary probes (4-wire technolog	y), Cable length: 3	3 m			0554 0213
тс						
Stationary probe with stainless steel sleeve, TC Type K	Ø6 mm Ø6 mm Connection: Fixed cable 1.9 m		0 to 05 °C	Class 2*	20 s	0628 7533
Penetration probe TC with ribbon cable, Type K, cable length 2 m, IP 54	60 mm	30 11111	0 to 20 °C	Class 1	7 s	0572 900
Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K	20 mm		0 to 70 °C	Class 2*	150 s	0602 4792
Magnetic probe, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces, TC Type K	Ø 21 mm Connection: Fixed cable 1.6 m		0 to 00 °C	Class 2*		0602 4892
Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Meas. range short-term up to +280 °C, TC Type K	Connection: Fixed cable 1.2 m		0 to 30 °C	Class 2*	5 s	0602 4592
Pipe wrap probe with velcro strip; for temperature measurement on pipes with diameter up to max. 120 mm; Tmax. +120 °C; TC Type K	395 mm		0 to 20 °C	Class 1*	90 s	0628 0020
Thermocouple with TC adapter, flexible, 800 mm long, fibre glass, TC Type K	800 mm Ø 1.5 mm		0 to 00 °C	Class 2*	5 s	0602 0644
Thermocouple with TC adapter, flexible, length 1500 mm , fibreglass, TC Type K			0 to 00 °C	Class 2*	5 s	0602 064
Thermocouple with TC adapter, flexible, 1500 mm long, PTFE, TC Type K	1500 mm Ø 1.5 mm		0 to 50 °C	Class 2*	5 s	0602 064
Immersion tip, flexible, TC Type K	⊆ <u>500 mm</u> Ø 1.5 mm		00 to 000 °C	Class 1*	5 s	0602 5792
Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable for measurements in smelters), TC Type K	2 1000 mm		00 to 300 °C	Class 1*	4 s	0602 5693

• The specified accuracy class of the testo Saveris radio and Ethernet probe is achieved using these external probes.

\*According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K).



# External temperature and humidity probes

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	t <sub>99</sub>	Part no.
NTC			· /	I	
Stub probe, IP 54	35 mm Ø 3 mm	-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (+40.1 to +70 °C)	15 s	0628 7510
Stationary probe with aluminium sleeve, IP 65	40 mm Ø 6 mm Connection: Fixed cable; Cable/length: 2.4 m	-30 to +90 °C	±0.2 °C (0 to +70 °C) ±0.5 °C (remaining range)	190 s	0628 7503*
Accurate immersion/penetration probe, 6m cable, IP 67	Ø 3 mm Ø 3 mm Connection: Fixed cable; Cable/length: 6 m	-35 to +80 °C	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	5 s	0610 1725*
Accurate immersion/penetration probe, cable: 1.5 m long, IP 67	40 mm Ø 3 mm Connection: Fixed cable; Cable/length: 1.5 m	-35 to +80 °C	±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	5 s	0628 0006*
Penetration probe NTC with ribbon cable, cable length 2 m, IP 54	60 mm 30 mm Ø 5 mm Ø 3.6 mm	-40 to +125 °C	±0.5 % of m.v. (+100 to +125 °C) ±0.2 °C (-25 to +80 °C) ±0.4 °C (remaining range)	8 s	0572 1001
Wall surface temperature probe, e.g. to prove damage in building material	Connection: Fixed cable; Cable/length: 3 m	-50 to +80 °C	±0.2 °C (-25 to +80 °C) ±0.5 °C (-40 to -25.1 °C)	20 s	0628 7507
Stainless steel NTC food probe (IP65) with PUR cable	Ø 4 mm     Ø 3 mm       Connection: Fixed cable;       Cable/length: 1.6 m	-50 to +150 °C <sup>2)</sup>	±0.5% of m.v. (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (remaining range)	8 s	0613 2211*
Pipe wrap probe with Velcro for pipe diameter to max. 75 mm, Tmax. +75 °C, NTC	300 mm Connection: Fixed cable; Cable/length: 1.5 m	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)		0613 4611

The standard temperature probes from the Testo range can be individually tailored to your application. For more information please contact your Testo partner.

Probe type	Dimensions Probe shaft/probe shaft tip	Measuring range	Accuracy	Part no.
%RH				
Humidity/temperature probe 12 mm	Ø 12 mm	-20 to +70 °C 0 to 100 %RH	±0,3 °C ±2 %RH at +25 °C (2 to 98 %RH) ±0,03 %RH/K ± 1 digit	0572 6172
Humidity/temperature probe 4 mm	Ø 4 mm	0 to +40 °C 0 to 100 %RH	±0,3 °C ±2 %RH at +25 °C (2 to 98 %RH) ±0,08 %RH/K ± 1 digit	0572 6174

♦ The specified accuracy class of the testo Saveris radio and Ethernet probe is achieved using these external probes.

\* Probe tested to EN 12830 for suitability in the transport and storage sectors

2) Long-term measurement range +125 °C, short-term +150 °C or +140 °C (2 minutes)



### Accessories

Power supply	Part no.
Battery for radio probe (4 AA alkali manganese mignon batteries)	0515 0414
Battery for radio probe for use below -10 °C (4 Energizer L91 Photo lithium)	0515 0572
Li-ion rechargeable battery for testo Saveris Base, Ethernet probe and testo Saveris Analog Coupler U1E	0515 5021
Mains unit international 100-240 V AC / 6.3 V DC for mains operation or battery charging in instrument	0554 1096
Power supply (top-hat rail mounting) 90 to 264 VAC / 24 VDC (2.5 A)	0554 1749
Power supply (desktop) 110 to 240 VAC / 24 VDC (350 mA)	0554 1748
Other features	
Magnetic foot aerial (dualband) with 3 m cable, for Base with GSM module (not suitable for USA, Canada, Chile, Argentina, Mexico)	0554 0524
Magnetic foot aerial (quadband) for Base with GSM module	0554 0525
Alarm module (visual + acoustic), can be connected to Base alarm relay, Ø 70 x 164 mm, 24 V AC/DC / 320 mA, perm. light: red, perm. tone: buzzer approx. 2.4 kHz (Mains unit 0554 1749 required)	0572 9999 ID-Nr. 0699 6111/1
testo Saveris protective housing for protection from high-pressure cleaning and impact, IP 69 K suitable for wireless probes T1 / T1D / T2 / T2D / Pt / PtD / H4D	0572 0200
Programming adapter (from Mini-DIN to USB) for Base, Ethernet probe, Converter and Extender for configurating IP addresses as well as for the adjustment of testo Saveris probes via testo Saveris adjustment software	0440 6723
Software	
testo Saveris SBE software licence 1 user	0572 0180
testo Saveris PROF software licence 1-5 users incl. Web Access	0572 0181
testo Saveris PROF software licence 1-5 users Classic	0572 0192
testo Saveris PROF software licence +1 user (only in connection with the testo Saveris PROF software (order no. 0572 0181 or 0572 0192))	0572 0190
testo Saveris PROF software licence + unlimited number of users (only in connection with the testo Saveris PROF software (order no. 0572 0181 or 0572 0192))	0572 9999
testo Saveris CFR software licence 1-5 users incl. Web Access	0572 0182
testo Saveris CFR software licence +1 user (only in connection with the testo Saveris CFR software (order no. 0572 0182))	0572 0193
testo Saveris CFR software licence + unlimited number of users (only in connection with the testo Saveris CFR software (order no. 0572 0182))	0572 9999
testo Saveris Web Access	0572 0001
testo Saveris adjustment software incl. connection cable to wireless and Ethernet probes	0572 0183
Calibration Certificates	
ISO calibration certificate/temperature; Temperature probes; calibration points -8 °C; 0 °C; +40 °C per channel/instrument (suitable for testo Saveris T1/T2)	0520 0171
ISO calibration certificate/temperature; Temperature probes; calibration points -18 °C; 0 °C; +60 °C; per channel/instrument (not suitable for testo Saveris T1/T2)	0520 0151
DAkkS calibration certificate temperature; Temperature probes; calibration points -20 °C; 0 °C; +60 °C; per channel/instrument (not suitable for testo Saveris T1/T2)	0520 0261
ISO calibration certificate humidity; Humidity probe, calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument	0520 0076
DAkkS calibration certificate humidity; Humidity probe, calibration points 11.3 %RH and 75.3 %RH at +25 °C; per channel/instrument	0520 0246