testo 1 Channel Temperature Radio Probe with Display Instruction Manual

Probes and probe accessories for testo Saveris 1
Instruction manual

Contents

About this document

The instruction manual forms an integral part of the measurement data monitoring system testo Saveris 1.

- Keep this documentation to hand so that you can refer to it when necessary.
- Please read this instruction manual through carefully and familiarize yourself with the product before putting it to use.
- Hand this instruction manual on to any subsequent users of the product.
- The instruction manual for the testo Saveris 1 measurement data monitoring system is divided into the following sub-documents:
  o Operating instructions for the testo Saveris 1 measurement data monitoring system
  o Commissioning instructions for the testo Saveris 1 measurement data monitoring system
  o Operating instructions for individual system components
- Pay particular attention to the safety instructions and warning advice in order to prevent injury and damage to the product.
- Familiarity with a PC as well as the Microsoft® products is assumed in this documentation.

Symbols and writing standards

Display	Explanation
	Note: basic or further information.
1. … 2. …	Action: several steps, the sequence must be followed.
• …	List
> …	Action: one step or optional step.
– …	Result of an action.
✓ …	Requirement
1… 2…	Position numbers for the clarification of the relationship between text and picture.
Menu	Elements of the instrument, the instrument display or the program interface.
[OK]	Control keys of the instrument or buttons of the program interface.
… | …	Functions/paths within a menu.
“…”	Example entries

Safety and disposal

- Only operate the product properly, for its intended purpose, and within the parameters specified in the technical data.
- Do not apply any force.
- Do not operate the product if there are signs of damage on the housing, mains unit or connected cables.
- The product must be checked for any visible damage before commissioning.
- Dangers may also arise from objects to be measured or the measuring environment. Always comply with the locally valid safety regulations when carrying out measurements.
- Use only original spare parts from Testo.
- Temperature information given on probes/sensors relates only to the measuring range of the sensor technology. Do not expose handles and supply lines to temperatures above 45°C (113°F), unless they are explicitly approved for higher temperatures.

⚠ WARNING
Risk of burns due to hot probes, probe shafts and sensor tips!

- Do not get hold of hot parts (> 45°C/113°F) with bare hands immediately after a measurement.
- In the event of burns, immediately cool the relevant spot with cold water and consult a doctor if necessary.
- Allow probes, probe shafts and sensor tips to cool down.

- The product must not be used in potentially explosive atmospheres, if it is not explicitly approved for these areas.
- Do not expose the product to any extremely high or low temperatures. Avoid temperatures below -5°C or above 45°C. The exception is when a product has been explicitly approved for other temperatures.

- Prevent the product from falling.

Disposal

- At the end of its useful life, deliver the product to the separate collection point for electric and electronic devices (observe local regulations) or return the product to Testo for disposal.
-  WEEE Reg. No. DE 75334352

Cleaning the instrument

- Clean the product with a dry, soft cloth. Do not use any alcohol, aggressive cleaning agents and solvents or other washing liquids to clean the product.
- Use distilled water, or alternatively mild solvents or degreasers.
- Store solvents and degreasers separately from the product, because leaking solvents and degreasers may cause damage to the product.

Storage

- Keep the product away from any liquids and do not put it into water. Protect it from rain and humidity.
- Do not store the product together with solvents.

Probes

3.1 Digital probes

	The following applies to all humidity probes: Not for condensing atmosphere. For continuous applications in high humidity (>80 %RH at ≤30 °C for >12 h, >60 %RH at >30 °C for >12 h), please contact us via **www.testo.com**.
	The digital door contact (0572 2161) and the digital analog coupler (0572 2166) are not supported by the WLAN logger testo Saveris 2 H2 (0572 2015 01).
	The digital analog coupler for testo 150 (0572 2166) is connected to testo 150 data logger modules in the same way as the other digital probes with TUC connectors. Please note that power supply for a transmitter connected to the digital analog coupler (0572 2166) is not provided via the testo 150 data logger module.
	Documentation for the interface for connecting transmitters is enclosed with the digital analog coupler (0572 2166).

Designation	Order no.	Measuring range	Accuracy	T90	Resolution	Connection
Temperature probe with stainless steel sensor (PT100) Accuracy class A	0572 2163	-85 to +150 °C for metal tip -85 to +100 °C or cable	±(0.25 °C + 0.3% of measured value) (-49.9 to +99.9 °C) ±0.55 °C (other measuring ranges)	t°C: 20 s	0.01 °C	TUC

Humidity/temperature probe with cable	0572 2165	-30 to +50 °C/ 0 to 100 % RH	±0.4 °C at +25 °C ±2.0 %RH at 0 to 90 %RH at +25 °C ±0.03 %RH/K (k=1) ± 1,0%RH hysteresis ± 1%RH / year drift	t RH: 20 s t °C: 240 s	0.1 °C	TUC
Stub humidity/temperature probe	0572 2164	-30 to +50 °C/0 to 100 %RH	±0.4 °C at +25 °C ±2.0 %RH at ± 0 to 90 %RH at +25 °C0.03 %RH/K (k=1) ± 1,0%RH hysteresis ± 1%RH / year drift	t RH: 20 s t°C: 240 s	0.1 °C	TUC
Stub temperature probe (NTC)	0572 2162	-30 to +50 °C	±0.4 °C	t°C: 240 s	0.1 °C	TUC
Digital door contact	0572 2161			n.a.		TUC
Digital analog coupler	0572 2166	4 to 20 mA; 0 to 10V	Power Maximum error: ±0.03 mA Resolution (min. error): 0.75 µA (16 bit) typical error: 5 µA Voltage 0 to 1 V maximum error: ±1.5 mV Resolution (min. error): 39 µV (16 bit) Typical error: 250 µV 0 to 5 V maximum error: ±7.5 mV Resolution (min. error): 0.17 mV Typical error: 1.25 mV 0 to 10 V maximum error: ±15 mV Resolution (min. error): 0.34 mV Typical error: 2.50 mV	n.a.		TUC
Flexible temperature probe (Pt100) with 1m cable	0618 0071	-100 to +265 °C	±(0.3 °C + 0.3% of measured value	45 s	0.01 °C	TUC
Glass-coated laboratory probe (Pt100) with 1.6 m cable	0618 7072	-50 to +400 °C	±(0.3 °C + 0.3% of measured value (-50 to +300 °C) ±(0.4 °C + 0.6% of measured value) (+300.01 to +400 °C)	45 s	0.01 °C	TUC

3.2 NTC probe

Designation	Order no.	Measuring range	Accuracy	T90	Resolution	Connection
Temperature probe with ribbon cable	0572 1001	-40 to +125 °C	±0.5% of measured value (100 to +125 °C) ±0.2 °C (-25 to +80 °C) ±0.4 °C (other measuring range)	8 s	0.1 °C	Mini DIN
Stub temperature probe	0572 2153	-30 to +50 °C	±0.2 °C	240 s	0.1 °C	Mini DIN
Stub temperature probe	0628 7510	-20 to +70 °C	±0.2 °C (-20 to +40 °C) ±0.4 °C (40.1 to +70 °C)	15 s	0.1 °C	Mini DIN
Temperature probe with long cable	0610 1725	-35 to +80 °C	±0.2 °C (-25 to +75 °C) ±0.4 °C (other measuring range)	5 s	0.1 °C	Mini DIN
Temperature probe with sensor made of aluminium housing	0628 7503	-30 to +90 °C	±0.2 °C (0 to +70 °C) ±0.5 °C (other measuring range)	12 s	0.1 °C	Mini DIN
Temperature probe with Velcro	0613 4611	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)	60 s	0.1 °C	Mini DIN
Wall surface temperature probe	0628 7507	-50 to +80 °C	±0.2 °C (-25 to +80 °C) ±0.5 °C (-40 to 25.1 °C)	20 s	0.1 °C	Mini DIN
Temperature probe with surface sensor	0628 7507	-50 to +80 °C	±0.2 °C (0 to +70 °C)	20 s	0.1 °C	Mini DIN
Temperature probe with stainless steel sensor for food	0613 2211	-50 to +150 °C	±0.5% of measured value (+100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (other measuring range)	8 s	0.1 °C	Mini DIN

Waterproof temperature probe with stainless steel sensor	0613 1212	-50 to +150 °C	±0.5% of measured value (100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (other measuring range)	10 s	0.1 °C	Mini DIN
Immersion and penetration probe	0628 0006	-35 to +80 °C	±0.2 °C (-25 to +75 °C) ±0.4 °C (-35 to -25.1 °C) ±0.4 °C (+75 to +80 °C)	5 s	0.1 °C	Mini DIN
Waterproof immersion and penetration probe with 1.2 m cable	0615 1212	-50 to +150 °C	±0.5% of measured value (100 to +150 °C) ±0.2 °C (-25 to +74.9 °C) ±0.4 °C (other measuring range)	5 s	0.1 °C	TUC
Robust air probe with 1.2 m cable	0615 1712	-50 to +125 °C	±0.2 °C (-25 to +80 °C) ±0.4 °C (other measuring range)	30 s	0.1 °C	TUC
Temperature probe with Velcro	0615 4611	-50 to +70 °C	±0.2 °C (-25 to +70 °C) ±0.4 °C (-50 to -25.1 °C)	30 s	0.1 °C	TUC

3.3 Pt 100

Designation	Order no.	Measuring range	Accuracy	T90	Resolution	Connection
Temperature probe (Pt100)	0572 7001	-85 to +150 °C	Class A	35 s	0.01 °C	Mini DIN
Temperature probe (Pt100)	0609 1273	-50 to +400 °C	Class A (-50 to +300 °C) Class B (other measuring range)	12 s	0.01 °C	Mini DIN
Temperature probe (Pt100)	0609 2272	-50 to +400 °C	Class A (-50 to +300 °C) Class B (other measuring range)	10 s	0.01 °C	Mini DIN

3.4 Thermocouple

Designation	Order no.	Measuring range	Accuracy	T90	Resolution	Connection

Temperature probe with penetration tip (type K)	0572 9001	-40 to +220 °C	Class 1*	7 s	0.1 °C	TC
TC connector without probe	0220 0094			n.a.		TC
Temperature probe (type K)	0602 0644	-50 to +400 °C	Class 2*	5 s	0.1 °C	TC
Temperature probe (type K)	0602 0645	-50 to +400 °C	Class 2*	5 s	0.1 °C	TC
Temperature probe (type K)	0602 0646	-50 to +250 °C	Class 2*	5 s	0.1 °C	TC
Magnetic temperature probe (type K)	0602 4792	-50 to +170 °C	Class 2*	150 s	0.1 °C	TC
Magnetic temperature probe (type K)	0602 4892	-50 to +400 °C	Class 2*	60 s	0.1 °C	TC
Flexible, plug-in immersion measuring tip Temperature probe (type K)	0602 5693	-200 to +1300 °C	Class 1*	4 s	0.1 °C	TC
Flexible immersion measuring tip (type K)	0602 5792	-200 to +1000 °C	Class 1*	5 s	0.1 °C	TC
Temperature probe with fast response time (type K)	0602 5693	-200 to +1000 °C	Class 1*	1 s	0.1 °C	TC
Temperature probe with clamping bracket (type K)	0602 4592	-60 to +130 °C	Class 2*	5 s	0.1 °C	TC
Temperature probe with Velcro (type K)	0628 0020	-50 to +120 °C	Class 1*	90 s	0.1 °C	TC
Temperature probe with stainless steel sleeve (type K)	0628 7533	-50 to +205 °C	Class 2*	20 s	0.1 °C	TC
Waterproof superfast needle probe (type T)	0628 0027	-50 to +250 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining measuring range)**	2 s	0.1 °C	TC
Frozen food probe for screw-in use without pre-drilling (type T)	0603 3292	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining measuring range)**	8 s	0.1 °C	TC
Robust food penetration probe (type T)	0603 2492	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining measuring range)**	6 s	0.1 °C	TC

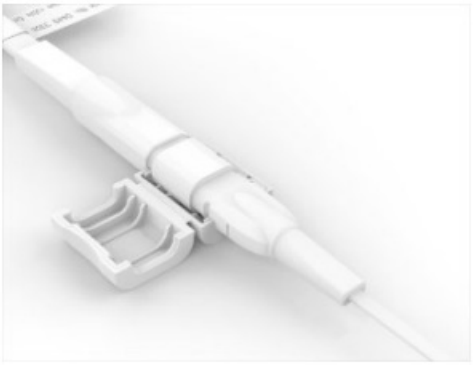
Waterproof standard immersion/penetration probe (type T)	0603 1293	-50 to +350 °C	±0.2 °C (-20 to +70 °C) Class 1 (remaining measuring range)**	7 s	0.1 °C	TC

TUC extension cable for digital probes

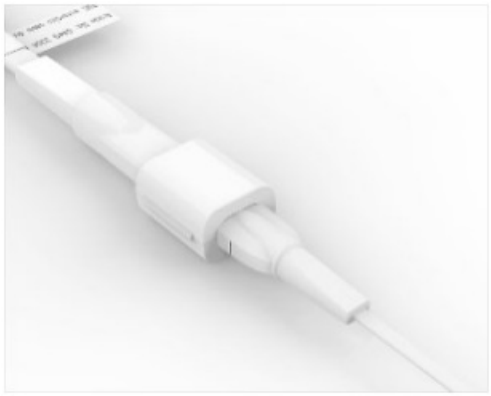
4.1 Using the TUC extension cable

1. Connect the cable to the testo 150 data logger module.
2. Route the cable.
3. Connect the TUC probe to the TUC socket of the extension cable.

4. Insert the plug-in connector into the safety clip.



5. Close the safety clip (click).



4.2 Extension cable for digital sensors

Description	Temperature range	Protection class	Order no.
TUC extension cable (2 m)	-30 °C to +50 °C	IP54	0449 3302
TUC extension cable (6 m)	-30 °C to +50 °C	IP54	0449 3306
TUC extension cable (10 m)	-30 °C to +50 °C	IP54	0449 3310

	Only permitted for digital probes! A maximum 4 cables may be connected between logger and probe for the cable extension. Maximum permissible total length including probe: 30 m.
	Commercially available cables with USB-C connections are not suitable for use with digital probes.
	The TUC extension cables are designed for use with digital probes. They must not be used with analog probes, since performance deviations can be expected.
	To monitor refrigerators and freezers, the cable bushings of the refrigerating appliances are used when routing TUC extension cables. Digital probes are attached inside the appliances and can be easily changed for the purposes of calibr ation.
	TUC extension cables must never be routed through door seals. For appliances without a cable bushin g, select digital probes with a ribbon cable and pass the ribbon cable through the door seal.
	TUC extension cables should not be put inside ultra-deep freezers (80 °C). Select digital probes with a flat ribbon cable and pass the ribbon cable through the door seal to connect to the TUC extension cabl e.

4.3 Other accessories

4.3.1 Mini-DIN / TUC adapter

Description	Order no.
Mini-DIN / TUC adapter	0572 2160

Mini-DIN / TUC adapters are exclusively designed for adapting digital probes with TUC plug to the WLAN data logger testo Saveris 2 H2 (0572 2015 01).

4.3.2 Sintered caps

Description	Order no.
Sintered cap	0554 0641
Filter cap/wire mesh	0554 0757
Sintered Teflon filter	0554 0759
Protective cap	0554 0755
Probe cap	0192 0265

Testo SE & Co. KGaA
Celsiusstr. 2
79822 Titisee-Neustadt
Germany
Phone: +49 7653 681-0
E-mail: info@testo.de
www.testo.com
0970 2815 en 06 – 10.2024

Documents / Resources

	testo 1 Channel Temperature Radio Probe with Display [pdf] Instruction Manual 1 Channel Temperature Radio Probe with Display, 1 Channel, Temperature Radio Probe with Display, Radio Probe with Display, Display

References

- User Manual