

Be sure. **testo**



**Always on the safe side.  
From anywhere. At any time.**

Climate monitoring 4.0: Automated, digital and uninterrupted.

# Climate monitoring for a **smart world.**

You can now deal with monitoring and documentation **easily and reliably.**

Climate monitoring is becoming more and more important in many sectors. However, although we have been living in a world of unlimited digital possibilities for a long time now, we still usually monitor temperature and humidity values using obsolete and very complex methods. But it can also be done differently: with testo Saveris 2, the smart climate monitoring system which uses the advantages of the digital world – giving us more time for the important things.

testo Saveris 2 is also unbeatable with regard to its versatility of applications and cost-savings. Whether in facility management or quality assurance of food or drugs: the system's data loggers are extremely flexible and can be used almost anywhere where temperature and humidity need to be measured over long periods. With penetration, surface and air temperature probes, the external probe portfolio offers a solution for almost every type of application.

**Food**



**Pharmaceuticals**



**Facility management**



# Less stress. **More reliability.**



**Online  
monitoring  
system**

These **advantages** make your life easier.



### **Keep an eye on all the data.**

You can view, call up and evaluate all measuring values from anywhere in the world using an internet-capable smartphone, tablet or PC.



### **Save time and walking distances.**

The measuring values are automatically transmitted to the Testo Cloud by wireless LAN. You save considerable walking distances and the manual readout of loggers.



### **Simply start up.**

No need to install any software to use testo Saveris 2. All you need is an internet connection, wireless LAN and a normal web browser.



### **Effortless documentation.**

No more tedious paperwork, missing values and long lists: with testo Saveris 2, you can display, analyze and document your measuring values automatically. Measurement data and reports are exportable and can be automatically sent by e-mail.



### **Respond promptly.**

If there are violations of limit values, testo Saveris 2 provides you with immediate alerts by e-mail, SMS or push notification. This allows you to respond quickly to malfunctions.



### **Flexible extension.**

The system can be adapted to your requirements and extended as required by additional data loggers. Furthermore, loggers can be combined with probes for the most versatile applications. Customization is also possible.



### **Know that your data are safe.**

Your measuring values are stored in the Testo Cloud. This is subject to strict security standards. In addition to this, the data logger has a wrap-around memory for up to 10,000 measuring values, so that no data can be lost, even if there is a power cut or loss of wireless LAN.



### **Effortless connection.**

testo Saveris 2 uses a variety of wireless LAN standards: (standard) IEEE 802.11 b/g/n networks, as well as IEEE 802.1x networks with WPA2 Enterprise encryption. Thanks to the use of your existing wireless LAN infrastructure, no costs for a separate wireless base station are incurred.

Online monitoring system



# Everything under control. Anytime and anywhere.

With the Cloud-based **testo Saveris 2 software**, you can deal with the documentation and analysis of your measuring values quickly and easily.

The testo Saveris 2 system comprises two components: **hardware** and **Cloud-based software**.

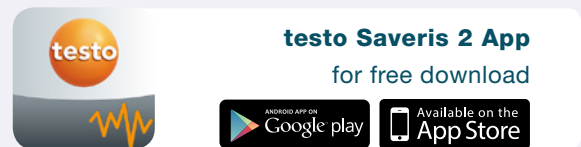
The hardware comprises a range of temperature and humidity loggers with a large probe portfolio.

The Cloud-based software is available to you anytime and anywhere: simply call up [www.saveris.net](http://www.saveris.net) on your browser and get going. No software installation is necessary.

The commissioning of the data loggers is child's play and can be carried out either via the browser or via the testo Saveris 2 App. After the data loggers have been connected to your wireless LAN, they send the measurement data automatically to the Cloud database, where these can be really easily analyzed. The Testo Cloud offers a high standard of security and works according to national and international standards (e.g. PCI DSS, ISO 27001 and 95/46/EC). It enables you to view your measuring values at any time and from anywhere by PC, smartphone or tablet. In addition, you get an immediate alarm when there are limit value violations. With testo Saveris 2, you are sure to adhere to standards and regulations, optimize processes, ensure quality and increase your efficiency. Today's way to monitor climate.

## The testo Saveris 2 App.

With the App for iOS and Android, you can operate the testo Saveris 2 WiFi data logger system even more easily and flexibly now.



### More efficient commissioning\*:

- Easy identification and selection of the WiFi network
- Faster parallel commissioning of several loggers

### Easy network analysis\*:

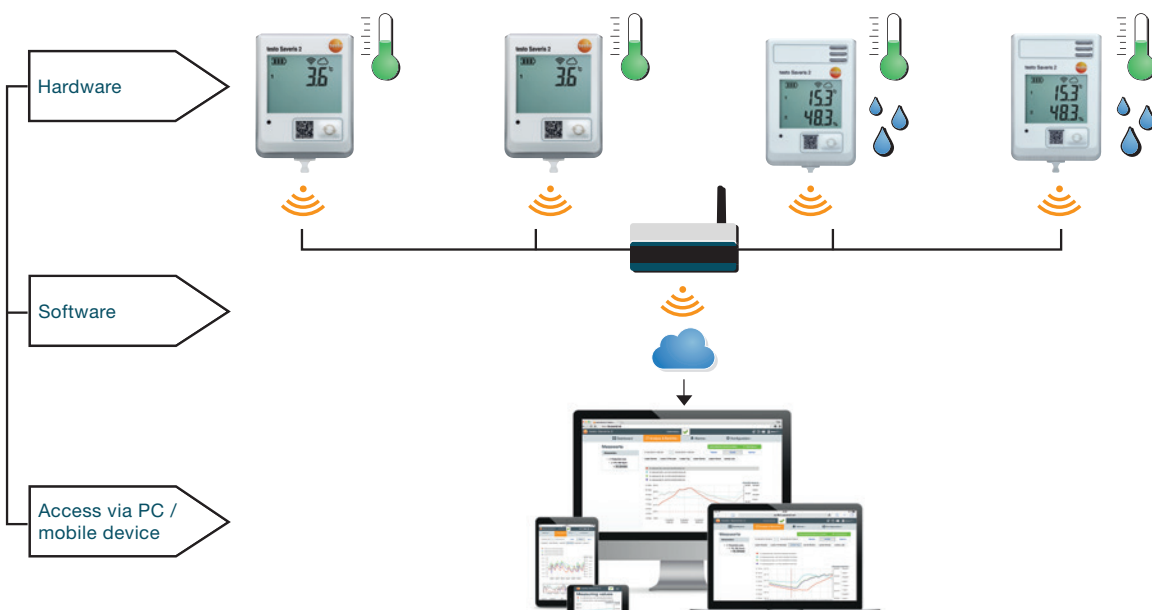
- Test the strength and range of your WiFi network
- Create and send status reports

### Reliable alarm functions:

- Push notifications of limit value violations
- Combinable with e-mail or SMS alarms

\*These functions are only available in the Android version of the testo Saveris 2 App.

## The testo Saveris 2 system



# The testo Saveris 2 Cloud package.



Online  
monitoring  
system




Specially developed so you can deal with any measurement task.

The purchase of a testo Saveris 2 logger allows you to use the Basic licence for the testo Saveris 2 software free of charge. You can use it for data measurement and recording, along with manual report creation.

In addition, we also offer you an Advanced licence which is subject to a charge. This overview will show you when it makes sense to acquire this.

	Explanation	Cloud licence Basic	Cloud licence Advanced
<b>Measuring cycle</b>	With many applications, the temperature changes slowly or you do not really want to record a temperature change until it has been constant over a defined period of time. In these cases, you choose a measuring cycle of $\geq 15$ min.	15 min to 24 h	1 min to 24 h
<b>Data storage</b>	Many users download the measurement data at regular intervals and save them on their PC. If you prefer to have all the data at a central location, choose the Advanced licence.	Max. 3 months	Max. 2 years
<b>Reports</b>	Some users download the reports manually and store them locally on their PC. It is more convenient if you configure the reports according to your own requirements and get them sent automatically by e-mail.	Manual	Automatic
<b>Number of users per account</b>	If you would like to just use the system yourself, one user is enough for you. Many users appreciate being able to create additional users who can then process alarms directly in the system.	1	10
<b>Alerts</b>	One of the greatest advantages of the Saveris 2 system is that you can not only measure and record data, but also set an alert for limit value violations. You need the Advanced licence to be able to use alerts via SMS.	E-mail	E-mail, SMS*

\* The package includes 25 SMS per logger and year; additional SMS can be booked. For prices, see Saveris.net, free Basic licence. For prices, see Saveris.net\*

Ready to go in three steps	
 <b>Register</b>	<p>Please register at <a href="http://www.saveris.net">www.saveris.net</a>: You will receive an e-mail from us with a link to check your registration. In order to activate your account, click on this link or copy it into your browser.</p> <p><b>Note:</b> Please check your spam folder in case the e-mail does not arrive in your inbox.</p>
 <b>Log in</b>	<p>You can now log into your testo Saveris 2 account.</p> <p><b>Please note:</b> When you register, you automatically get the free Basic licence. If required, change your Cloud licence to Advanced which is subject to a charge.</p>
 <b>Configure</b>	<p>Integrate your loggers and configure the software to suit your requirements.</p> <p><b>You will find videos on this at:</b> <a href="http://www.testo.com">www.testo.com</a></p>



## Your security is important to us.

### Protection of data and privacy with testo Saveris 2 and testo 160.

In order to guarantee the integrity and intactness of your personal data and measuring values when using Testo data loggers, Testo and its IT partners not only meet the highest security standards, regulations and guidelines, the loggers are also based on state-of-the-art security concepts. As much as necessary and as little as possible is stored, in order to keep your system efficient and secure. You will find all the relevant information on this page; if you have any further questions, we are available to help you at all times.

#### Which data are we talking about?

- Personal data: stored user data are used for the purposes of alerts and login. Web traffic is analyzed anonymously. For service purposes, web traffic is logged anonymously.
- Measurement data: to guarantee the timed documentation and traceability of measured values.

#### How does Testo protect your data?

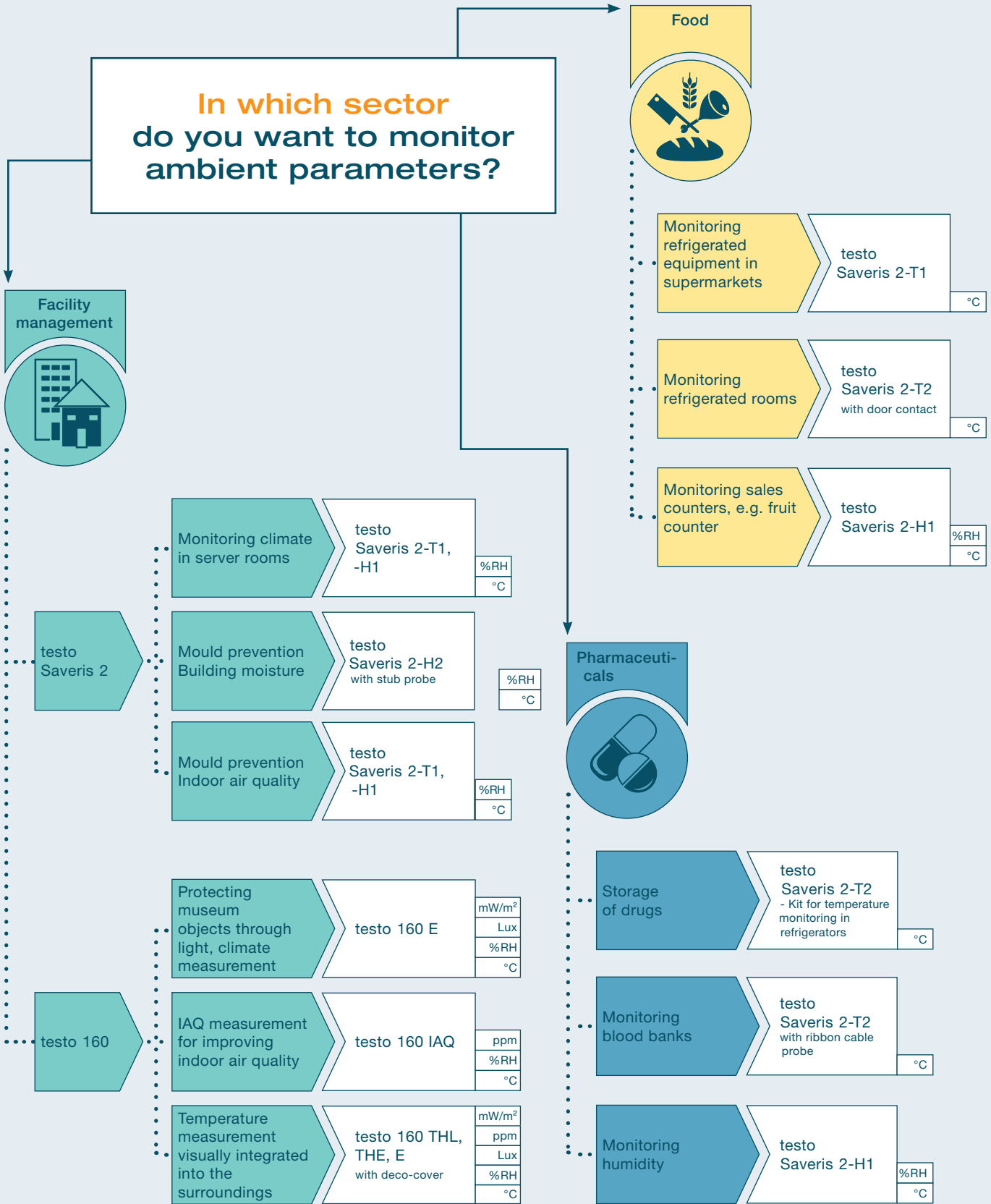
- All data are protected by robust security measures and are transmitted in encrypted form.
- We always keep our eye on your system availability with our monitoring and service tools.
- The testo Saveris 2 software is controlled securely via your internet browser (SSL & https transfer) or by App.
- For our Cloud infrastructure, we work with our qualified and certified partner, Amazon Web Services (AWS). (e.g. PCI DSS, ISO 27001 and 95/46/EC certification). Amazon has no access of any kind to the content of your data. We deal with European customers via certified data centers in Germany; in addition, there are further data centers that are mutually independent in America and Asia, in order to ensure security, error tolerance and low latency.

- We keep your system as current as possible with regular updates.
- Correctness of data is also part of a high level of security. Measuring values continue to be stored in the data logger until the system has confirmed their integrity and they have been securely saved in the Cloud.
- The testo Saveris 2 and testo 160 data loggers can be integrated into all common WiFi networks and also support WPA2 Enterprise.
- The ports used for communication by the testo Saveris 2 and testo 160 data loggers only need to be opened for outgoing communications. Bidirectional releases are not necessary.
- Each of your testo Saveris 2 and testo 160 data loggers has a unique MAC address.

#### Detailed information on the testo Saveris 2 and testo 160 WiFi data logger system

Supported networks	Supported network encryption	Router ports (no bidirectional releases necessary)	Browser ports	Identification
Order numbers 0572 2031 to 0572 2035: IEEE 802.11 b/g/n IEEE 802.1X	Unencrypted WEP WPA (TKIP) WPA2 (AES)	TCP From order no. 0572 203x port 8883; protocol MQTT To order no. 0572 200x port 1883; protocol MQTT	Port 443 (https) Port 80 (http)	IP address: Dynamic (DHCP), but can be defined statically  Unique MAC address
Order numbers 0572 2001 to 0572 2005: IEEE 802.11 b/g/n  2.4 GHz, transfer rate up to 150 MBps	For data loggers with order numbers 0572 2031 to 0572 2035, WPA2 Enterprise networks are also supported with the following authentication methods: EAP-TLS, EAP-TTLS-TLS, EAP-TTLS-MSCHAPv2, EAP-TTLS-PSK, EAP-PEAP0-TLS, EAP-PEAP0-MSCHAPv2, EAP-PEAP0-PSK, EAP-PEAP1-TLS, EAP-PEAP1-MSCHAPv2, EAP-PEAP1-PSK	UDP Port 53 (DNS name resolution) Port 123 (SNTP time synchronisation); if necessary, own NTP server can be defined		

# In which sector do you want to monitor ambient parameters?



Food



# Because only **safe foods** really taste good.

Uninterrupted temperature monitoring and easy documentation.

When dealing with fresh, easily perishable foods, it is vital to ensure optimum ambient conditions at all times, in order to prevent inferior goods coming into circulation. Use of testo Saveris 2 ensures that the temperature at all relevant refrigeration points always precisely complies with the specifications. That safeguards the quality of your goods and ensures customer satisfaction.

### In food markets and supermarkets

Fresh foods present a daily challenge to those responsible for quality in food retail. Fruit, vegetables, meat, fish and dairy products not only need to look appetizing, they must also be hygienically flawless and therefore safe. In both cases, the temperature is crucial.

### In butcher's shops, bakeries and food-processing businesses

Bakeries, butcher's shops and smaller food-processing businesses, such as delis or snack bars, face the special challenge of often having to deal with food production, storage and sales all under one roof. In large kitchens, such as canteens and catering operations, a high level of care, diligence and expertise is also required.



"The quality of our raw and cooked meat products has top priority for us on a day-to-day basis. The testo Saveris 2 data logger system meets our high requirements, provides a top price-performance ratio and gives me the security I want at all times. We fully recommend it."

**Ralf Spindler, Germany**

Master butcher and managing director, Metzgerei Spindler



Freezer monitoring in supermarkets (testo Saveris 2-T1)



Refrigerated room monitoring at the butcher's (testo Saveris 2-T2 with external NTC probe with door contact)



Refrigerated counter monitoring in supermarkets (testo Saveris 2-H1)





## Ordering suggestion

### Refrigerated room monitoring

We recommend placing the logger just outside the refrigerated room for monitoring.



**Advantage:** You do not need to go into the refrigerated room to read off the temperature. Use the testo Saveris 2-T2 with ribbon cable to do this.

**Tip:** To make sure that the refrigerated room door is always properly closed, you can add a door contact sensor. This means you are alerted and your valuable goods are protected.

If you do not have the option of laying a cable into the refrigerated room, you will have to measure the

temperature directly in the refrigerated room: you can use the testo Saveris 2-T1 with an internal temperature probe for this. If you would like to monitor the opening of the refrigerated room door at the same time, the testo Saveris 2-T2 is the best solution. You can attach both an external temperature probe (e.g. the NTC stub probe) and a door contact sensor to this logger.

**Note:** For measurements in refrigerated rooms, the testo Saveris 2 logger can also be operated with a mains unit or with lithium batteries instead of with conventional batteries.

<p><b>testo Saveris 2-T1</b> WiFi data logger (wireless LAN) with display and internal NTC temperature sensor, including USB cable, wall bracket, batteries and calibration protocol</p> <p>Order no. 0572 2031</p>	
<p><b>testo Saveris 2-T2 with door contact</b> WiFi data logger (wireless LAN) with display for temperature measurement, two connections for external NTC temperature probes or door contacts, including USB cable, wall bracket, batteries and calibration protocol</p> <p>Order no. 0572 2032</p>	


<p><b>Stub probe, IP 54</b></p> <p>Order no. 0628 7510</p>	
<p><b>NTC temperature probe</b></p> <p>Order no. 0572 1001</p>	
<p><b>Door contact connection cable</b></p> <p>Order no. 0572 2152</p>	


## Ordering suggestion

### Refrigerated equipment monitoring

Our testo Saveris 2-T2 is suitable for the monitoring of your freezers. Fix the measuring instrument at the critical measuring point. The measuring values are automatically sent to the Cloud database. You are reliably alerted when there are any temperature deviations. You can respond even more flexibly to your various day-to-day work requirements using the time-controlled alarms. For example, alerts can be avoided by disabling defined temperature limits while a freezer is being defrosted.

**Note:** For the monitoring of fruit and vegetables, it also makes sense to monitor humidity as well as temperature. We recommend you use our testo Saveris 2-H1 temperature and humidity logger with an integrated temperature and humidity probe to do this.

<p><b>testo Saveris 2-T1</b> WiFi data logger (wireless LAN) with display and internal NTC temperature sensor, including USB cable, wall bracket, batteries and calibration protocol</p> <p>Order no. 0572 2031</p>	
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<p><b>testo Saveris 2-H1</b> WiFi data logger (wireless LAN) with display for measuring temperature and relative humidity, internal capacitive humidity sensor, including USB cable, wall bracket, batteries and calibration protocol</p> <p>Order no. 0572 2034</p>	
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Pharmaceuticals



# So drugs stay healthy too.

Automated temperature and humidity monitoring for the storage of medicinal products in pharmacies and hospitals with **testo Saveris 2**.

Patient health is of primary importance in pharmacies and hospitals. Here in particular, it is all the more important to consistently avoid risks that arise due to the improper storage of drugs or blood products. Temperature and humidity-sensitive drugs must be stored under controlled ambient conditions and their compliance continuously

monitored and documented. Those in charge need to spend a great deal of time on this, because errors can have costly consequences: just one pharmacy refrigerator often stores drugs with a value of 20,000 euros – not to mention the value of a good reputation.



"We are totally committed to drug safety. End consumers should be aware: our pharmacies deliver one hundred percent quality. We do all we can to ensure that the drugs are treated carefully and correctly. The testo Saveris 2 system enables us to do this without any great effort. I would recommend the system unreservedly to my colleagues."

**Alexander Jaksche**, pharmacist and proprietor of the "Apotheke an der Mathildenhöhe" pharmacy in Darmstadt



"testo Saveris 2 is optimally tailored to our daily needs in terms of storing temperature-sensitive drugs. We are immediately notified when temperatures in the refrigerators exceed the critical threshold between 2°C and 8°C. This is crucial for compliance with the cold chain and indispensable for certain medicines. It means we can react quickly enough to prevent damage to stored products."

**François-Xavier Crozet**  
France  
Director, RUBEX Pharma



Refrigerator monitoring in hospitals (testo Saveris 2-T2 with external NTC probe with door contact)



Monitoring of storage in pharmacies (testo Saveris 2-H1)



Ultra low-temperature freezer monitoring in laboratories (testo Saveris 2-T3 with temperature probe)



## Ordering suggestion

### Pharmaceutical refrigerator monitoring

Compliance with legally prescribed temperatures in drug and blood product refrigerators is indispensable for patient recovery. testo Saveris 2 makes it easy for you to keep control over the large number of measuring points which are often difficult to access. The alarm function allows round-the-clock fast responses to undesired changes in the ambient conditions. This means you can for example prevent life-saving blood products being ruined.

#### testo Saveris 2 - kit for temperature monitoring in refrigerators

testo Saveris 2-T2; WiFi data logger (wireless LAN) with display for temperature measurement, two connections for external NTC temperature probes or door contacts, including two ribbon-cable temperature probes, two temperature simulation flasks for filling with a temperature buffer suitable for the relevant area of application, USB cable, wall bracket, batteries and calibration protocol



Order no. 0572 2103

## Ordering suggestion

### Pharmaceutical cleanroom

Use the testo Saveris 2-H1 WiFi data logger to monitor the temperature and humidity of your cleanroom production.

#### testo Saveris 2-H1

WiFi data logger (wireless LAN) with display for measuring temperature and relative humidity, internal capacitive humidity sensor, including USB cable, wall bracket, batteries and calibration protocol



Order no. 0572 2034

## Ordering suggestion

### Pharmaceutical ultra low-temperature freezer monitoring

Ultra low-temperature freezers ensure the safe long-term storage of medical samples at -86°C, even down to -150°C in laboratory freezers. In order to monitor these freezers, you can use the testo Saveris 2-T3 logger with the appropriate thermocouple probe.

#### testo Saveris 2-T3

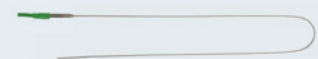
testo Saveris 2-T3; WiFi data logger (wireless LAN) with display for temperature measurement, two connections for external TC temperature probes (types K, T, J), including USB cable, wall bracket, batteries and calibration protocol



Order no. 0572 2033

#### Temperature probes

Exceptionally fast temperature probe with a large measuring range (-200 to +1000°C) for measurements in air, liquids, pastes and on surfaces.



Order no. 0602 0493



# Measurement solutions for all requirements in **facility management**.

Automated temperature and humidity monitoring.

As the facility manager of an industrial company, you have a major responsibility for a number of business-critical processes. It is your task to guarantee the technical availability of the systems. If breakdowns of central functional units, such as the air conditioning system, are identified too late, they can cause heat damage to products and machines, resulting in high follow-on costs for the company.

For this reason, the monitoring of ambient parameters such as temperature and humidity is an important indicator for imminent and acute malfunctions in technical systems. With the automatic testo Saveris 2 WiFi data logger system, Testo provides the possibility of measuring ambient data automatically, even at difficult-to-access locations, and of bringing them together in one system. You will learn exactly how this works on the next page.



"testo Saveris 2 gives us more reliability. The system is an excellent investment; a simple solution which allows us to react immediately to any changes in our data center – from anywhere, at any time. I recommend it."

**Leonardo Machado**  
Portugal  
IT Director CICCOPN



Server room monitoring in industry (testo Saveris 2-T1)



Mould prevention – building humidity (testo Saveris 2-H2 with the digital, external humidity probe 0572 2154)



Mould prevention – indoor air quality (testo Saveris 2-T1)



## Ordering suggestion

### Server room monitoring

The right IAQ must be maintained everywhere where there are servers running. If it becomes too warm or too humid in a server room, the risk of a breakdown increases drastically. And in spite of an air conditioning system being in operation, unexpected power peaks can sometimes lead to unanticipated increases in temperature. With the testo Saveris 2 WiFi data logger system, you can monitor the temperature and humidity in server rooms automatically and with a minimum of effort, thus increasing the availability of your systems.

#### testo Saveris 2-T1

WiFi data logger (wireless LAN) with display and internal NTC temperature sensor, including USB cable, wall bracket, batteries and calibration protocol

Order no. 0572 2031



#### testo Saveris 2-H1

WiFi data logger (wireless LAN) with display for measuring temperature and relative humidity, internal capacitive humidity sensor, including USB cable, wall bracket, batteries and calibration protocol

Order no. 0572 2034



## Ordering suggestion

### Mould prevention - building drying

For the determination and prevention of damage caused to buildings by damp, we recommend the testo Saveris 2-H2 WiFi data logger with the digital, external humidity/temperature probe 0572 2154.

#### testo Saveris 2-H2

testo Saveris 2-H2; WiFi data logger (wireless LAN) with display for measuring temperature and relative humidity, connection for one external humidity probe, including USB cable, wall bracket, batteries and calibration protocol

Order no. 0572 2035



#### Plug-in humidity/temperature probe

Order no. 0572 2154



## Ordering suggestion

### Mould prevention – IAQ

For the determination and prevention of damage caused to buildings due to ambient conditions, we recommend the testo Saveris 2-T1 or testo Saveris 2-H1 data logger.

#### testo Saveris 2-T1

WiFi data logger (wireless LAN) with display and internal NTC temperature sensor, including USB cable, wall bracket, batteries and calibration protocol

Order no. 0572 2031



#### testo Saveris 2-H1

WiFi data logger (wireless LAN) with display for measuring temperature and relative humidity, internal capacitive humidity sensor, including USB cable, wall bracket, batteries and calibration protocol

Order no. 0572 2034



Facility management



# Climate monitoring for museums, archives and public buildings.

Monitoring of temperature, humidity, illuminance, UV radiation and CO<sub>2</sub> concentration.

If you want to monitor valuable items in museums and archives, the testo 160 monitoring system will help you to do this. It enables you to protect expensive works of art from mould, bleaching, corrosion or distortion, comprehensively yet unobtrusively. Well thought-out features, such as an alert when the maximum accumulated amount of light within a defined period of time is reached, customizable deco-covers which enable the loggers to blend into the surroundings or wall bushings for display cases, are specially designed for your applications in the

museum and archiving field.

If there are a lot of people in a room, the air quality deteriorates and our sense of well-being is reduced. The testo 160 IAQ logger enables you to reliably monitor indoor air quality and thus not just to protect valuable items, but also to create the perfect feel-good atmosphere for your employees or customers.



"The four-hour fire rated concrete walls are very dense and I was unsure if a wireless system would work. However, it's a very neat solution and gives us flexibility to move loggers in the future without having to rewire."

**Jim Grundy**  
London  
Director of Art Operations, Gander & White



Temperature measurement visually integrated into the surroundings (testo 160 THL, THE, E with deco-cover)



Protecting museum exhibits through light, climate measurements (testo 160)





IAQ to improve indoor air (testo 160 IAQ)



## Ordering suggestion

### Protecting museum objects through light, climate measurements


Unsuitable light conditions and inappropriate indoor air quality pose a major risk to exhibits. They accelerate natural ageing processes, cause irreparable micro-cracks and bleach colours or cause discolouration. Measure temperature and humidity, lux and UV radiation reliably in display cases or exhibition rooms at all times with our testo 160 E WiFi data logger.

<p><b>testo 160 E</b> testo 160 E WiFi data logger with connection options for two probes (S-TH, S-LuxUV or S-Lux)</p> <p>Order no. 0572 2022</p>	
<p><b>testo 160 THL</b> testo 160 THL WiFi data logger with integrated temperature and humidity sensors, as well as lux and UV sensor</p> <p>Order no. 0572 2024</p>	

## Ordering suggestion

### Indoor air quality



Reliable monitoring is particularly important, because indoor air quality is linked to our well-being. The testo 160 IAQ WiFi data logger is ideal for monitoring indoor air quality in facility management.

<p><b>testo 160 IAQ</b> testo 160 IAQ WiFi air quality logger with display and integrated sensors for temperature, humidity, CO<sub>2</sub> and atmospheric pressure, including mains unit</p> <p>Order no. 0572 2014</p>	
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## Ordering suggestion

### For temperature measurement visually integrated into the surroundings

Testo's deco-cover means the focus is always on your exhibits. Thanks to the customizable housing cover, you can integrate the WiFi data logger perfectly and discreetly into any exhibition.

<p><b>testo 160 THE</b> testo 160 THE WiFi data logger with integrated temperature and humidity sensors, along with connection options for two probes (S-TH, S-LuxUV or S-Lux)</p> <p>Order no. 0572 2023</p>	
<p><b>testo 160 E</b> testo 160 E WiFi data logger with connection options for two probes (S-TH, S-LuxUV or S-Lux)</p> <p>Order no. 0572 2022</p>	



# A comparison of testo Saveris 2 loggers.

## A comparison of testo Saveris 2 loggers



All data loggers HACCP-certified



testo Saveris 2-T1



testo Saveris 2-T2



testo Saveris 2-T3

### General data

Short description	testo Saveris 2-T1; WiFi data logger (wireless LAN) with display and internal NTC temperature sensor, including USB cable, wall bracket, batteries and calibration protocol	testo Saveris 2-T2; WiFi data logger (wireless LAN) with display for temperature measurement, two connections for external NTC temperature probes or door contacts, including USB cable, wall bracket, batteries and calibration protocol	testo Saveris 2-T3; WiFi data logger (wireless LAN) with display for temperature measurement, two connections for external TC temperature probes (types K, T, J), including USB cable, wall bracket, batteries and calibration protocol
Order number	0572 2031	0572 2032	0572 2033
Recommended selling price	xxx	xxx	xxx

### Technical data

Measurement parameter	Temperature	Temperature	Temperature
High accuracy and large measuring range			
Channels	1x NTC internal	2x NTC or door contact external	2x thermocouple type K/J/T external
Measuring range	-30 to +50°C	-50 to +150°C	K: -195 to +1350°C J: -100 to +750°C T: -200 to +400°C
Accuracy	±0.5°C	±0.3°C	±(0.5 + 0.5% of m.v.) °C
Resolution	0.1°C	0.1°C	0.1°C
Measuring cycle	Dependent on the Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h	Dependent on the Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h	Dependent on the Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h
Radio frequency	2.4 GHz (IEEE 802.11 b/g/n)	2.4 GHz (IEEE 802.11 b/g/n)	2.4 GHz (IEEE 802.11 b/g/n)
Transmission interval	1 min to 24 h (15 min default)	1 min to 24 h (15 min default)	1 min to 24 h (15 min default)
Operating/storage temperature	-30 to +50°C/-40 to +70°C	-30 to +50°C/-40 to +70°C	-30 to +50°C/-40 to +70°C
Battery life	24 months	24 months	24 months
Dimensions/weight	95 x 75 x 30.5 mm / 240 g	95 x 75 x 30.5 mm / 240 g	95 x 75 x 30.5 mm / 240 g
Protection class	IP 65	IP 65	IP 54
EN certificate	EN 12830	EN 12830	



## A comparison of testo Saveris 2 loggers



All data loggers HACCP-certified



**testo Saveris 2-H1**



**testo Saveris 2-H2**

<b>General data</b>		
Short description	testo Saveris 2-H1; WiFi data logger (wireless LAN) with display for measuring temperature and relative humidity, internal capacitive humidity sensor, including USB cable, wall bracket, batteries and calibration protocol	testo Saveris 2-H2; WiFi data logger (wireless LAN) with display for measuring temperature and relative humidity, connection for one external humidity probe, including USB cable, wall bracket, batteries and calibration protocol
Order number	0572 2034	0572 2035
Recommended selling price	xxx	xxx
<b>Technical data</b>		
Measurement parameter	Temperature & humidity	Temperature & humidity
High accuracy and large measuring range	-	-
Channels	1x NTC/humidity internal	1x NTC/humidity external
Measuring range	-30 to +50°C / 0 to 100% RH	Probe-specific / depending on probe
Accuracy	± 0.5°C / ± 2%RH	Probe-specific / depending on probe
Resolution	0.1°C / 0.1% RH	0.1°C / 0.1% RH
Measuring cycle	Dependent on the Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h	Dependent on the Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h
Radio frequency	2.4 GHz (IEEE 802.11 b/g/n)	2.4 GHz (IEEE 802.11 b/g/n)
Transmission interval	1 min to 24 h (15 min default)	1 min to 24 h (15 min default)
Operating/storage temperature	-30 to +50°C/-40 to +70°C	-30 to +50°C/-40 to +70°C
Battery life	24 months	24 months
Dimensions/weight	115 x 82 x 31 mm / 250 g	95 x 75 x 30.5 mm / 240 g
Protection class	IP 30	IP 54
EN certificate	-	-

## A comparison of testo 160 loggers.

### A comparison of testo 160 loggers



testo 160 IAQ


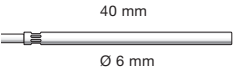
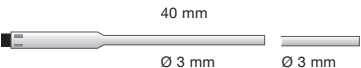
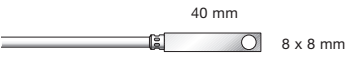

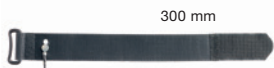



testo 160 E

General data		
Short description	testo 160 IAQ WiFi air quality logger with display and integrated sensors for temperature, humidity, CO <sub>2</sub> and atmospheric pressure, including mains unit	testo 160 E WiFi data logger with connection options for two probes (S-TH, S-LuxUV or S-Lux)
Order number	0572 2014	0572 2022
Recommended selling price	xxx	xxx
Technical data		
Measurement parameter	Temperature, humidity, ppm, mbar	Temperature, humidity, lux, mW/m <sup>2</sup>
Measuring range	0 to +50°C 0 to 100% RH (non-condensing) 0 to 5,000 ppm 600 to 1100 mbar	Probe-specific / depending on probe
Accuracy	±0.5°C ±2% RH at +25°C and 20 to 80% RH ±3% RH at +25°C and < 20% RH and > 80% RH ±1% RH hysteresis ±1% RH / year drift ±(50 ppm + 3% of m.v.) at +25°C Without external power supply: ±(100 ppm + 3% of m.v.) at +25°C ± 3 mbar at +22°C	Probe-specific / depending on probe
Resolution	0.1°C / 0.1% RH 1 ppm / 1 mbar	Probe-specific / depending on probe
Measuring cycle	Dependent on the Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h	Dependent on the Cloud licence Basic: 15 min to 24 h Advanced: 1 min to 24 h
Deco-cover for optimum individual adaptation of the loggers to the surroundings	✔	✔
Operating/storage temperature	0 to +50°C/0 to +50°C	-10 to +50°C/-20 to +50°C
Battery life	12 months	18 months
Dimensions/weight	117 x 82 x 32 mm / 269 g	76 x 64 x 22 mm / 96 g
Protection class	IP 20	IP 20


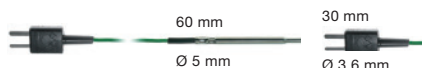
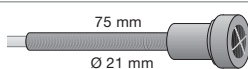
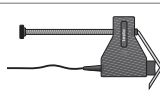
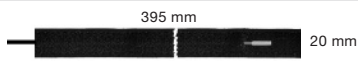



# Temperature probes for testo Saveris 2-T2

Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	t <sub>99</sub>	Order no. EUR
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  <b>xxx</b>
Stationary probe with aluminium sleeve, IP 65, fixed cable 2.4 m	 40 mm Ø 6 mm	-30 to +90°C	±0.2°C (0 to +70°C) ±0.5°C (remaining meas. range)	190 s	0628 7503  <b>xxx</b>
Accurate immersion/penetration probe, cable length 6 m, IP 67, fixed cable	 40 mm Ø 3 mm    Ø 3 mm	-35 to +80°C	±0.2°C (-25 to +74.9°C) ±0.4°C (remaining meas. range)	5 s	0610 1725  <b>xxx</b>
Probe for surface measurement, fixed cable, 2 m	 40 mm 8 x 8 mm	-50 to +80°C	±0.2°C (0 to +70°C)	150 s	0628 7516  <b>xxx</b>
Penetration probe, NTC with ribbon cable, cable length 2 m, IP 54, fixed cable	 60 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 meas. range)	8 s	0572 1001  <b>xxx</b>
Pipe wrap probe with Velcro tape for pipe diameters up to max. 75 mm, Tmax. +75°C, NTC, fixed cable	 300 mm	-50 to +70°C	±0.2°C (-25 to +70°C) ±0.4°C (-50 to -25.1°C)	60 s	0613 4611  <b>xxx</b>
External temperature probe 12 mm, plug-in, without cable	 105 mm Ø 12 mm Ø 20 mm	-30 to +50°C	±0.2°C (-30 to +50°C)		0572 2153  <b>xxx</b>

You can find more probes at [www.testo.com](http://www.testo.com)



# Temperature probes for **testo Saveris 2-T3**

Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	t <sub>99</sub>	Order no. EUR
Stationary probe with stainless steel sheath, TC type K	 <p>40 mm Ø 6 mm</p> <p>Connection: fixed cable 1.9 m</p>	-50 to +205°C	Class 2*	20 s	0628 7533 <b>xxx</b>
Penetration probe, TC type K with ribbon cable, cable length 2 m, IP 54	 <p>60 mm Ø 5 mm</p> <p>30 mm Ø 3.6 mm</p>	-40 to +220°C	Class 1	7 s	0572 9001 <b>xxx</b>
Magnetic probe, adhesive power approx. 10 N, with adhesive magnets, for higher temperatures, for measurements on metal surfaces, TC type K	 <p>75 mm Ø 21 mm</p> <p>Connection: fixed cable 1.6 m</p>	-50 to +400°C	Class 2*		0602 4892 <b>xxx</b>
Pipe wrap probe for pipe diameters 5 to 65 mm, with replaceable measuring head, short-term measuring range up to +280°C, TC type K	 <p>Connection: fixed cable 1.2 m</p>	-60 to +130°C	Class 2*	5 s	0602 4592 <b>xxx</b>
Pipe wrap probe with Velcro tape, for measuring temperatures on pipes with diameters up to max. 120 mm, Tmax +120°C, TC type K	 <p>395 mm 20 mm</p> <p>Connection: fixed cable 1.5 m</p>	-50 to +120°C	Class 1*	90 s	0628 0020 <b>xxx</b>
Flexible, low-mass immersion measuring tip, ideal for measurements in small volumes, such as Petri dishes, or for surface measurements (e.g. fixing with adhesive tape), TC type K, 2 m, FEP-insulated thermal wire, temperature-proof to 200°C, oval cable with dimensions: 2.2 mm x 1.4 mm	 <p>Ø 0.25 mm 500 mm</p>	-200 to +1000°C	Class 1*	1 s	0602 0493 <b>xxx</b>

\* According to standard 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).

You can find more probes at [www.testo.com](http://www.testo.com)

# Humidity/temperature probes for **testo Saveris 2-H2**



Probe type	Probe shaft/probe shaft tip dimensions	Measuring range	Accuracy	Order no. EUR
Humidity/temperature probe, 12 mm, fixed cable, cable length 1.3 m		-30 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 2155  <b>xxx</b>
External humidity/temperature probe, 12 mm, plug-in without cable	 105 mm Ø 12 mm Ø 20 mm	-30 to +50°C 0 to 100% RH	±0.3°C ±2% RH	0572 2154  <b>xxx</b>

You can find more probes at [www.testo.com](http://www.testo.com)

## Order data for **testo Saveris 2** accessories

Accessories	Order no.	EUR
Mains unit for testo Saveris 2 WiFi data loggers	0572 2020	<b>xxx</b>
Battery for radio probes (4 x AA alkali manganese Mignon batteries)	0515 0414	<b>xxx</b>
Batteries for operating testo Saveris 2 WiFi data loggers below -10°C (4 x Energizer L91 Photo Lithium)	0515 0572	<b>xxx</b>
Magnetic adapter for testo Saveris 2 wall bracket for attachment to magnetic surfaces	0554 2001	<b>xxx</b>

## Probes for **testo 160**

Probe type	Temperature and humidity probe	Lux and UV sensor	Lux sensor
			
<b>Measuring range</b>	-10 to +50°C 0 to 100% RH	0 to 20,000 lux 0 to 10,000 mW/m <sup>2</sup>	0 to 20,000 lux
<b>Accuracy</b>	±0.5°C ±2% RH at +25°C and 20 to 80% RH ±3% RH at +25°C and < 20% RH and > 80% RH ±1% RH hysteresis ±1% RH / year drift	DIN 5032-7 class C-compliant. ±3 lux or ±3% of reference (DIN 5032-7 class L) ±5 mW/m <sup>2</sup> or ±5% of m.v. (based on external reference)	DIN 5032-7 class C-compliant. ±3 lux or ±3% of reference (DIN 5032-7 class L)
<b>Order no.</b>	0572 2156	0572 2157	0572 2158
<b>EUR</b>	<b>xxx</b>	<b>xxx</b>	<b>xxx</b>

## Order data for **testo 160** accessories

Accessories	Order no.	EUR
Deco-cover for testo 160 TH / testo 160 THE / testo 160 E	0554 2006	<b>xxx</b>
Deco-cover for testo 160 THL	0554 2009	<b>xxx</b>
Deco-cover for testo 160 IAQ	0554 2012	<b>xxx</b>
Wall bracket for testo 160 TH / testo 160 THE / testo 160 E / testo 160 THL	0554 2013	<b>xxx</b>
Wall bracket for testo 160 IAQ	0554 2015	<b>xxx</b>

# Service overview

The **Testo bonus**: full service with expert advice, training and practical know-how.



## Advice

Competent advice offered by our experts.



## (Re)calibration

(Re)calibration of your sensors – also on site.



## Project planning

Definition of the scope of your system on site.



## Training

Instruction and training in using the system.



## Qualification

Qualification/validation of your system.



## Mapping

Determination of measuring locations for your sensors.



## Product solution

We have the right product solution for your requirement.



## Commissioning

Optional commissioning of your system.



## Support

If you have any questions, our experts are available to help.