



testo Saveris Inbound Cold Chain data logger 0572 2800

Instruction manual



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1 About this document

- Please read this instruction manual through carefully and spelling yourself with the product before use.

1.1 Use

- The instruction manual is an integral part of the instrument.
- Pay particular attention to the safety instructions and warning notices in order to prevent injuries and damage to the product.
- Keep this documentation on hand so that you can refer to it when necessary.
- Always use the complete original instruction manual.
- Ensure all users of the product throughly read this documentation.



In order to be able to use certain functions of this instrument (in particular the measurement data management), you need to accept the testo Cloud terms and conditions of use, which you will find under the login of the respective testo solution at www.testo.com/login.



Other Testo components are required for functions such as readout, evaluation, inspection and analysis of the measurement data of the data logger described here. These are not included in this documentation, however they can be viewed at www.testo.com/login/hilfe.

1.2 Icons

Display	Explanation
	Note: basic or further information
1 2 ...	Action: several steps, the sequence must be followed.
▸	Result of an action
✓	Requirements

2 Safety and waste disposal

2.1 Intended purpose

- The testo Saveris Food Logistics Inbound data logger is used to store and read out series of measurements during the transportation of products that are subject to cold chain requirements. .
- Configuration is customer-specific and is carried out during production at Testo. No subsequent modification of the configuration is possible.
- The data logger is designed for single use only. Therefore it must not be used more than once.
- Data loggers with an expired use-by date must not be used.
- Operation is manual, with no additional auxiliary devices.
- The data logger should be placed as close to the products as possible. However, the goods must not impair the logger.
- When positioning the data logger, make sure that the surrounding goods do not press on the button of the data logger.
- This logger requires the associated readout unit (order no. 0572 2802) and the testo Saveris Food Logistics Inbound software.

2.2 Safety instructions

- Only operate this instrument in the proper manner, for its intended purpose and within the parameters specified in the technical data.
- Do not operate the instrument if there are signs of damage on the housing.
- Always comply with the locally valid safety regulations when carrying out measurements. Dangers may also arise from objects to be measured or the measuring environment.
- Do not store the product together with solvents.

2.3 Warning notices

Always pay attention to any information denoted by the following warnings. Implement the precautionary measures specified!

Display	Explanation
CAUTION	Indicates possible damage to equipment.

2.4 Waste disposal

- Dispose of faulty rechargeable batteries and spent batteries in accordance with the valid legal specifications.
- At the end of its useful life, dispose of the instrument via separate collection for electrical and electronic devices. Please observe local regulations regarding waste disposal, or alternatively return the product to Testo for disposal.



WEEE Reg. No. DE 75334352

3 Description of the instrument

3.1 Scope of delivery

- Inbound Cold Chain data logger (40 pcs per PU)
- Optional: location sticker, location aid
- Short instructions

3.2 Configuration

The data logger is supplied ex-works with a specific configuration, which is defined by the customer. This configuration cannot subsequently be changed. Configurable parameters are:

- Measuring cycle (1 min – 24 h)
- Upper and lower alarm threshold (within the measuring range -30 °C to +50 °C / -22 °F to +122 °F)
- Alarm behavior (immediate alarm in the event of a limit value violation or cumulative alarm after x limit value violations)
- Start delay (0 mins to 60 mins, a 15-minute delay is recommended based on the sensor's acclimatization time)
- Optional accessories: location tape and location sticker

3.3 Operating elements of the product



Element	Element
1 Serial number/barcode (removable)	2 Start/Check button
3 LED (red)	4 LED (green)
5 Serial number/barcode (integrated)	6 Order number and configuration
7 Refer to instruction manual	

4 Product use

4.1 Commissioning

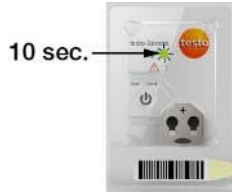
- 1 Switch the logger on.



2 The logger's green and red LEDs flash briefly to acknowledge successful activation.



3 LED flashes green: system test successful
 ▶ Data logger starts recording readings



LED flashes red: system test unsuccessful
 ▶ Data logger must not be used.



Each time the **Start/Check** button is pressed again, this produces a status display.

LED lights up green: measurement data is within the limit values

LED lights up red: measurement data is outside the limit values

4 Optional: stick barcode label onto the delivery note.



- 5 Enclose data logger with the shipment.



- 6 Optional: attach location tape to the outside of the packaging.



- 7 Optional: attach location sticker to the packaging so that it is clearly visible from the outside.



4.2 Reading out data

- 1 Remove the data logger and immediately press the **Start/Check** button. While the button is pressed, the data logger indicates whether the limit values were adhered to/violated.
 - LED lights up green: limit values adhered to
 - LED lights up red: limit values violated

CAUTION

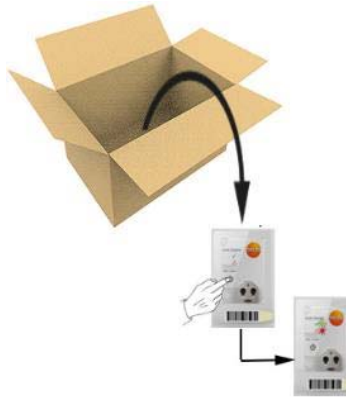
If too much time elapses between removing the data logger and pressing the button, this can lead to a limit value violation due to a deviating ambient temperature.

- 2 Pressing the button establishes a connection to the readout unit (order no. 0572 2802). The measurement data is transmitted to the database via the readout unit.

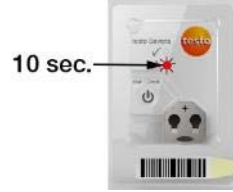
CAUTION

If no connection can be established, the data logger spends 60 seconds attempting to set up the connection. If no data transfer can be carried out within this time, the data logger resumes its measurement. If this happens, please repeat the readout process.

- 3 Following successful data transfer, the LEDs flash red and green at one-second intervals, continuously.



If the connection for the data transfer is interrupted, the red LED flashes. The data logger attempts to establish the connection again (step 8).



- 4 Any additional press of the button indicates whether the limit values were adhered to or violated.



- 5 The used data loggers can be assembled in the box provided and returned to Testo. Please clean the loggers before assembling them in the box.



4.3 LED status display

The following statuses are indicated via the LEDs:

Status LED	Cause
After being switched on, the data logger flashes green and red once.	Activation was successful.
After being switched on, the data logger flashes green at one-second intervals for a duration of 10 seconds	System test was carried out successfully.

Status LED	Cause
After being switched on, the data logger flashes red at one-second intervals for a total of 10 seconds.	An error occurred during the system test. Data logger must not be used!
The LED lights up green while the button is pressed.	The data logger limit values have thus far been adhered to.
The LED lights up red while the button is pressed.	The data logger limit values were violated.
The data logger flashes red for 10 seconds during/after the data transfer.	Data transfer was not successful. The data logger will make another attempt to transfer its data when the button is pressed again.
Green and red LEDs flash simultaneously at one-second intervals after removal and pressing the Start/Check button.	The measurement data was transferred successfully.

4.4 Displaying measurement data

The data logger does not have an integrated temperature display. Once the measurement data is transferred, it can be viewed in the database. For more detailed information, please consult the documentation for the testo Saveris Food Logistics Inbound software.

4.5 Alarms

The LEDs on the data logger provide an indication as to whether the limit values were adhered to or violated. After a data logger is switched on, if the **Start/Check** button is pressed again, one of the two LEDs lights up while it is pressed.

- › LED lights up green: the measurement data is within the limit values.
- › LED lights up red: the limit values were violated. There is an alarm.



Even after the data transfer, you can check whether alarms were triggered over the measuring period by pressing the **Start/Check** button.

5 Technical data

Feature	Value
Measuring range	-30 °C to +50 °C / -22 °F to +122 °F
Accuracy	± 0.5°C/°F
Resolution	0.1 °C/°F
Sensor type	Digital temperature sensor (semi-conductor basis)
Measurement channels	1 (internal)
Measurement parameters	Temperature (°C, °F)
Storage temperature	-40 °C to +85 °C /-40 °F to +185 °F
Operating temperature	-40 °C to +70 °C /-40 °F to +158 °C
Storage time	Up to 1 year before activation (see activation note on the instrument)
Battery type (cannot be replaced)	CR2032
Battery life (CR 2032)	24 days with 15 min. measuring cycle across the entire measuring range
Protection class	IP 67
Measuring interval	1 min – 24 h
Memory	4096 readings
Dimensions	95 mm x 65 mm x 6.7 mm
Weight	30 g
Transmission	Bluetooth Low Energy (BLE) 4.0 specification (2.4 GHz)
Bluetooth range	Up to 30m with no obstructions
Directives, standards, certificates	EMC 2014/30/EU RED 2014/53/EU Regulation 1935/2004


6 Authorizations







The use of the wireless module is subject to the regulations and stipulations of the respective country of use, and the module may only be used in each case in countries for which a country certification has been granted.

The user and every owner undertake to adhere to these regulations and prerequisites for use, and acknowledge that the re-sale, export, import, etc. in particular in, to or from countries without wireless permits, is their responsibility.

Product	Inbound Cold Chain Datenlogger
Mat.-No.	0572 2800 0572 2801
Date	06.12.2017

Country	Comments	
Australia		E 1561
Canada	Product IC: 6127B-0572280X See IC Warnings	

<p>Europa + EFTA</p>	  The EU Declaration of Conformity can be found on the testo homepage www.testo.com under the product specific downloads. EU countries: Belgium (BE), Bulgaria (BG), Denmark (DK), Germany (DE), Estonia (EE), Finland (FI), France (FR), Greece (GR), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Sweden (SE), Slovakia (SK), Slovenia (SI), Spain (ES), Czech Republic (CZ), Hungary (HU), United Kingdom (GB), Republic of Cyprus (CY). EFTA countries: Iceland, Liechtenstein, Norway, Switzerland										
<p>Japan</p>	  201-171022 See Japan information										
<p>USA</p>	<p>Product FCC ID: WAF-0572280X See FCC Warnings</p>										
<p>Bluetooth® Information</p>	<table border="1"> <thead> <tr> <th>Feature</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Bluetooth® range</td> <td>typical 30 m</td> </tr> <tr> <td>radio class</td> <td>Bluetooth® Low Energy (BLE) 4.0</td> </tr> <tr> <td>RF Band</td> <td>BT LE: 2402 – 2480MHz</td> </tr> <tr> <td>power output [E.I.R.P.]</td> <td>BT LE: 5dBm</td> </tr> </tbody> </table>	Feature	Values	Bluetooth® range	typical 30 m	radio class	Bluetooth® Low Energy (BLE) 4.0	RF Band	BT LE: 2402 – 2480MHz	power output [E.I.R.P.]	BT LE: 5dBm
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IC Warning

RSS-Gen & RSS-247 statement:

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution: Radio Frequency Radiation Exposure

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets the IC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 12 cm or more away from person's body in normal use position.

Co-Location:

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Attention : exposition au rayonnement de radiofréquences

Cet équipement est conforme aux limites d'exposition aux radiofréquences IC fixées pour un environnement non contrôlé et aux Lignes directrices relatives à l'exposition aux radiofréquences (RF). Cet équipement devrait être installé et utilisé à une distance d'au moins 12 cm d'un radiateur ou à une distance plus grande du corps humain en position normale d'utilisation.

Co-location

Ce transmetteur ne peut pas être installé en colocation ou être utilisé avec une autre antenne ou transmetteur, quel qu'en soit le type.

Japan Information

当該機器には電波法に基づく、技術基準適合証明等を受けた特定無線設備を装着している

FCC Statement

Information from the FCC (Federal Communications Commission)

For your own safety

Shielded cables should be used for a composite interface. This is to ensure continued protection against radio frequency interference.

FCC warning statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Shielded interface cable must be used in order to comply with the emission limits.

Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Radio Frequency Radiation Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body in normal use position.

Co-Location:

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.



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