LAN/PoE communication module
0554 9330
WLAN communication module
0554 9320
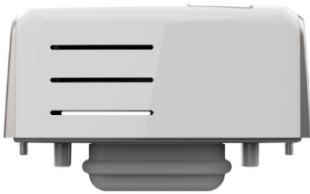**testo UltraRange communication module**
0554 9311 01 / 0554 9311 02
0554 9312 01 / 0554 9312 02
0554 9313 01 / 0554 9313 02
0554 9314 01 / 0554 9314 02

Instruction manual

Contents

1 About this document

- The instruction manual is an integral part of the testo Saveris measurement data monitoring system.

- 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 measurement data monitoring system is divided into the following sub-documents:
    - o Operating instructions for the testo Saveris measurement data monitoring system
    - o Commissioning instructions for the testo Saveris 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
ℹ	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.

Display	Explanation
... | ...	Functions/paths within a menu.
"..."	Example entries

2 Safety and disposal

Take the **testo information** document into account (accompanies the product).

3 Product-specific approvals

Please find the current country approvals in the enclosed **Approvals and Certifications** document.

4 Support

You can find up-to-date information on products, downloads and links to contact addresses for support queries on the Testo website at: www.testo.com.

5 Lieferumfang

- Communication module
- Instruction manual
- Testo information
- Approvals and Certifications

6 LAN/PoE[1] communication module

6.1 Use

The LAN/PoE communication module for the testo 150 data logger module is designed to transmit measurement data and to supply power via a LAN infrastructure. The product is used in the monitoring of products subject to cold chain requirements in warehouses, production facilities, cold rooms, clinics, laboratories and laboratory equipment.
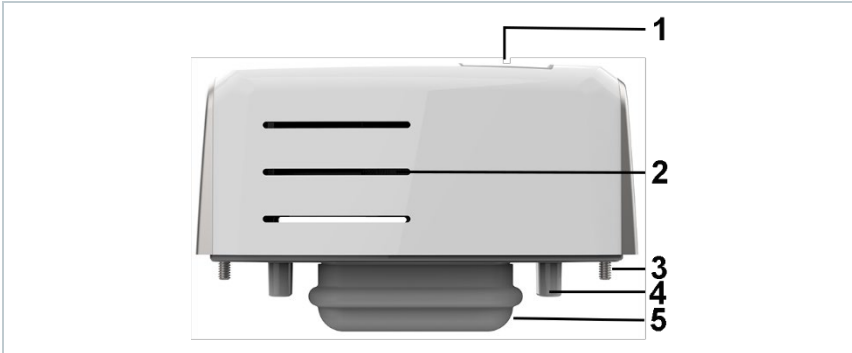
The product can only be used with other Testo components. Use of the product requires skilled personnel trained in the above areas.

If the network ports used are PoE-enabled, power can be supplied to a connected testo 150 data logger module via the Ethernet cable.

6.2 Product description

Overview

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[1] Power over Ethernet

1	Ethernet/PoE connection	2	Ventilation slits
3	Fastening screws	4	Positioning aid
5	TCI[2] connector		

6.3 Commissioning

Attaching the communication module
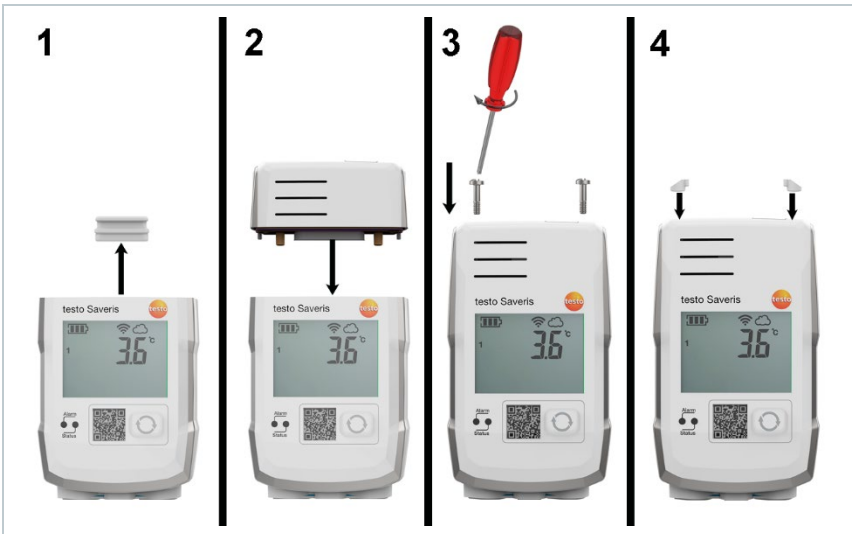
1 | Remove the protective cap.

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[2] Testo Communication Interface

2 Place the communication module on the testo 150 data logger module.

3 Attach the communication module to the testo 150 data logger module using the screws.

4 Close screw openings with rubber plugs.

> ℹ️ It is not possible to replace communication modules while the testo 150 data logger module is in operation!
>
> To replace a communication module, the power supply must be disconnected (remove batteries/pull out mains plug).

> ℹ️ Once the communication modules have been installed, the testo 150 data logger module can be returned to its original packaging.

6.4 Technical data for the LAN/PoE communication module

PoE performance class 0   max. 7 W

Feature	Value
Order no.	0554 9330
Connections	TCI LAN/PoE
Dimensions (W x H x L)	69.3 x 17.7 x 29.0 mm
Weight	Approx. 45 g
Protection class	IP30 with mounted testo 150 data logger module
Housing material	PC/PET (front); ABS+PC+10% GF/PET (rear)
Communication cycle	5 seconds - 24 hours
Storage temperature	-35 °C to 60 °C
Operating temperature	-35 °C to 50 °C

7 WLAN communication module

7.1 Use

The WLAN communication module for the testo 150 data logger module is designed for the wireless transmission of measurement data. The product is used in the monitoring of products subject to cold chain requirements in warehouses, production facilities, cold rooms, clinics, laboratories and laboratory equipment.

The product can only be used with other Testo components. Use of the product requires skilled personnel trained in the above areas.

7.2 Product description

Overview

1	Fastening screws	2	Positioning aid
3	TCI connector		

7.3 Commissioning

Attaching the communication module
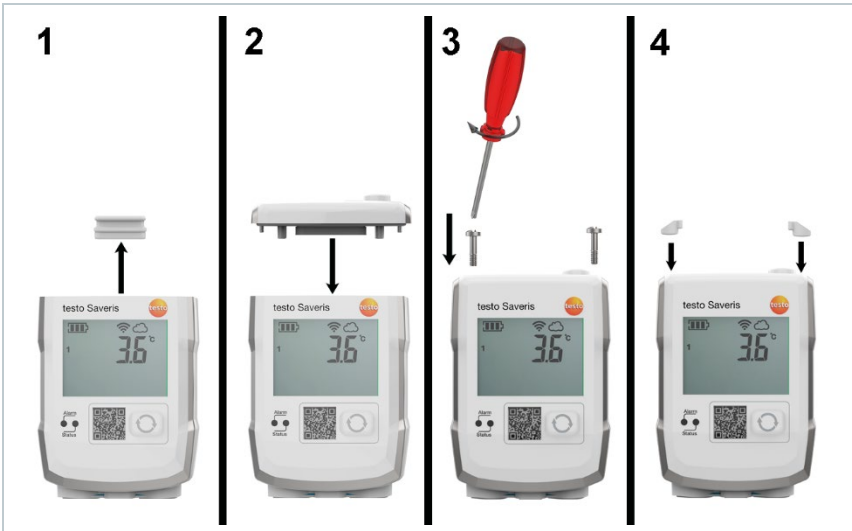
1 Remove the protective cap.

2 Place the communication module on the testo 150 data logger module.

3 | Attach the communication module to the testo 150 data logger module using the screws.

4 | Close screw openings with rubber plugs.

ℹ️ It is not possible to replace communication modules while the testo 150 data logger module is in operation!

To replace a communication module, the power supply must be disconnected (remove batteries/pull out mains plug).

ℹ️ Once the communication modules have been installed, the testo 150 data logger module can be returned to its original packaging.

ℹ️ Rücksprache PM:

weitere Infobox:

Intern verbaute Batterien werden nicht geladen, bei Ausfall der externen Versorgung misst der Logger bei 15 min Mess- und Kommunikationstakt noch ca ... und schaltet dann in Sleepmode.

7.4   Technical data for WLAN module

Feature	Value
Order no.	0554 9320
Connections	TCI
Dimensions (W x H x L)	69.3 x 9.5 x 29.0 mm
Weight	Approx. 17 g
Protection class	IP67 with mounted testo 150 data logger module
Housing material	PC/PET (front); ABS+PC+10% GF/PET (rear)
Communication cycle	1 min to 24 h
Storage temperature	-35 °C to 60 °C
Operating temperature	-35 °C to 50 °C

8   testo UltraRange communication module

8.1   Use

A testo UltraRange communication module with testo UltraRange radio technology is designed for the wireless transmission of measurement data.

UltraRange communication modules are designed either for combination with testo 150 data logger modules or with the UltraRange Gateway.

Use of the product requires skilled personnel trained in the above areas.

> **i** An UltraRange Gateway is required to transmit data to the Saveris base when testo 150 data logger modules are combined with UltraRange communication modules.

> **i** Select the appropriate regional version of the testo UltraRange communication module depending on the intended region of use.

> **i** Products of this type are generally not suitable for outdoor use when delivered. Prerequisite for outdoor use are measures that reliably protect the product from environmental influences (e.g. moisture, solar radiation). Please note that measures to protect the product from environmental influences may impair its performance.
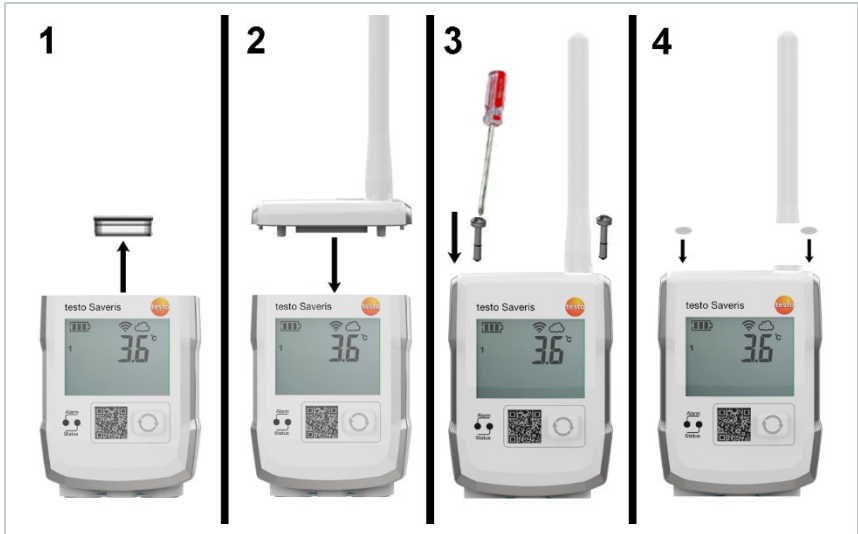
8.2 Product description

Overview
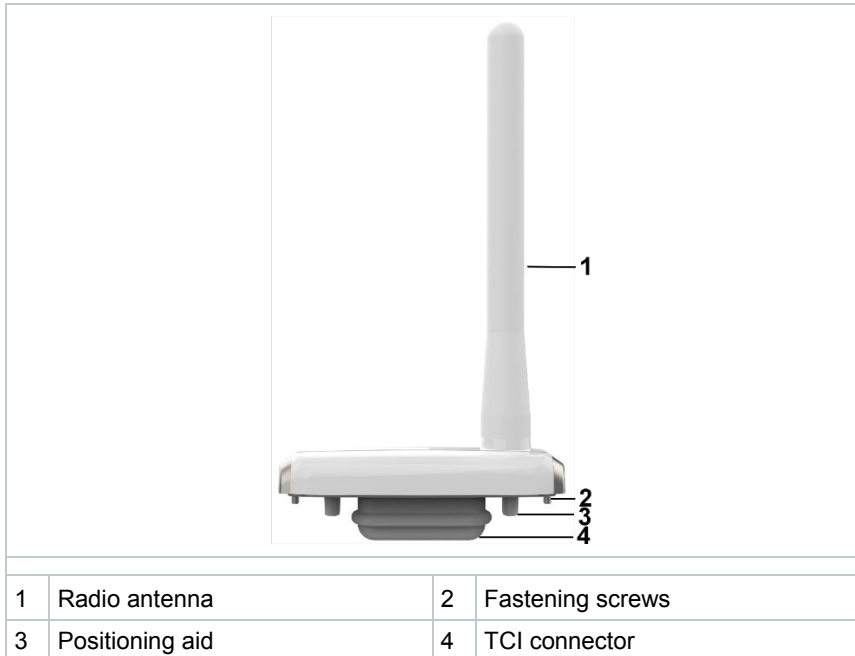
1	Radio antenna	2	Fastening screws
3	Positioning aid	4	TCI connector

8.3 Commissioning

Attaching the communication module

1	Remove the protective cap.
2	Place the communication module on the testo 150 data logger module.
3	Attach the communication module to the testo 150 data logger module using the screws.
4	Close screw openings with rubber plugs.

> **i** When using wireless modules with external antenna, please ensure that the screw connection between antenna and module has been tightened.

> **i** It is not possible to replace communication modules while the testo 150 data logger module is in operation!
>
> To replace a communication module, the power supply must be disconnected (remove batteries/pull out mains plug).

> **i** Once the communication modules have been installed, the testo 150 data logger module can be returned to its original packaging. To place testo 150 data logger modules with mounted UltraRange module in the packaging, unscrew the external antenna and place in the recess

provided in the packaging, underneath the testo 150 data logger module.

8.4 Technical data for the testo UltraRange communication module

Feature	Value
Order no.	0554 9311 01 (Region EU, testo 150 data logger module) 0554 9311 02 (Region EU, UltraRange Gateway)
	0554 9312 01 (Region US, testo 150 data logger module) 0554 9312 02 (Region US, UltraRange Gateway)
	0554 9313 01 (Region CN, testo 150 data logger module) 0554 9313 02 (Region CN, UltraRange Gateway)
	0554 9314 01 (Region JP, testo 150 data logger module) 0554 9314 02 (Region JP, UltraRange Gateway)
Connections	TCI[1]
Dimensions (W x H x L)	69.3 x 9.5 x 28.9 mm (without antenna)
Antenna length	90 mm
Weight	Approx. 31 g
Protection class	IP67 with mounted testo 150 data logger
Housing material	ABS+PC+10% GF/PET
Radio frequency testo UltraRange communication module - Region: EU - Region: US - Region: CN 868 - Region: JP 920	868 MHz 915 MHz 868 MHz 920 MHz
Wireless range	>100 m indoors
Communication cycle	1 min - 24 hours service life to be expected with standard parameters
Storage temperature	-40 °C to 60 °C
Operating temperature	-40 °C to 50 °C

9 Maintenance

9.1 Cleaning the housing

> If the housing is dirty, clean it with a damp cloth.

ℹ Use distilled water, or alternatively mild solvents, such as isopropanol. If using isopropanol, please refer to the instruction leaflet for the product. Isopropanol fumes have a slight narcotic effect, and typically cause irritation of the eyes and sensitive mucous membranes. When using it, please ensure that there is adequate ventilation.

ℹ The use of strong or harsh alcohol may result in damage to the instrument.

1 Moisten a microfibre cloth with 70% isopropanol.

2 Clean the data logger and wall bracket.

Other tolerated reagents for cleaning:

Active substances/additives	Maximum concentration
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	1% (%V/V)
Peracetic acid, acetic acid	3% (%V/V)
Glutaraldehyde	3% (%V/V)
Quaternary ammonium cations/compounds	1.5% (%V/V)
Sodium hydroxide	3% (%V/V)
Isopropanol	70% (%V/V)
Ethanol	80% (%V/V)
H_2O_2	35% (m%)

% V/V = volume percent
m % = mass fraction

Approval and Certification

Product	0554 9320 (WLAN communication module)
Mat.-No.	0554 9320
Model No.	0554 9320
Date	26.11.2019

ℹ 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 countries for which a country certification has been granted. The user and every owner has the obligation to adhere to these regulations and prerequisites for use, and acknowledges that the re-sale, export, import etc. in particular in countries without wireless permits, is his responsibility.

Country	Comments	
Australia New Zealand		E 1561
Canada	Contains IC: 451I-CC3120MOD IC: 6127B-05549320 See IC Warnings	
Europa + EFTA	CE ℹ 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	
		WEEE Reg. no. DE 75334352
Japan	R 201-170387 See Japan Information	
Turkey	Authorized	

USA	Contains FCC ID: Z64-CC3120MOD FCC ID: WAF-05549320 See FCC Warnings	
WLAN-module	**Feature**	**Values**
	Radio range	> 100 m (free field)
	WLAN Type	CC3120MODRNM MOBR
	Company	Texas Instruments
	WLAN radio class	Accord with the standard of IEEE 802.11b/g/n
	RF Band	2412-2472MHz
	Output power	15.64dBm
	Antenna gain	0.6dbi

IC Warnings

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.

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).

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.

FCC Warnings

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
RF exposure information: To maintain compliance with FCC RF exposure requirements, use the product that maintain a 20cm separation distance between the user's body and the host. It satisfies RF exposure compliance of FCC.

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

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。