



SIEMENS

SIPIX MO/SD ZN Industry Tablet PC

Operating Manual

<https://support.industry.siemens.com/cs/ww/en/view/109792654>

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Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.



DANGER

indicates that death or severe personal injury will result if proper precautions are not taken.



WARNING

indicates that death or severe personal injury may result if proper precautions are not taken.



CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by personnel qualified for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:



WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

Customer is responsible to prevent unauthorized access to its plants, systems, machines and networks. Systems, machines and components should only be connected to the enterprise network or the internet if and to the extent necessary and with appropriate security measures (e.g. use of firewalls and network segmentation) in place.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit <https://www.siemens.com/industrialsecurity>.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends to apply product updates as soon as available and to always use the latest product versions. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under <https://www.siemens.com/industrialsecurity>.

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1 Preface

Purpose of the manual

This document provides support in commissioning, configuring, and operating the SIPIX SD ZN tablet.

Key contents

The following key issues are addressed in this document:

- What is SIPIX MO/SD ZN used for?
- How is the SIPIX MO/SD ZN commissioned?
- How is the SIPIX MO/SD ZN configured?
- What options does the SIPIX MO/SD ZN offer for mobile maintenance and commissioning?
- How can the SIPIX MO/SD ZN be used for remote services and augmented reality functions?

Application

This document is valid for SIPIX MO/SD ZN with the following components:

- SSL VPN client for cRSP V1.5.3
- TightVNC V2.8.5
- SIPIX RC V2.0
- HotTab V50.1.22
- Simatic PDM V9.1 SP4

SIPIX in Industry Online Support

In addition to this manual, we offer the following Industry Online Support (<https://support.industry.siemens.com>) and our Expertise:

- <https://support.industry.siemens.com/cs/sc/4811/remote-services-for-process-instrumentation-?lc=de-WW>
- <https://support.industry.siemens.com/cs/products?mfn=ps&pnid=28672&lc=de-WW>
- Notifications that constantly provide you with the latest product information

2 Introduction

2.1 SIPIX MO/SD ZN

2.1.1 Overview

The SIPIX MO/SD ZN from Siemens is a robust and highly flexible industrial tablet PC for harsh environments and is your reliable mobile companion for every service call! Handy, powerful, and with a protected design, it can be optimally used for on-site maintenance, inspections, and service operations. Thanks to its varied functions, the SIPIX MO/SD ZN is the perfect companion for maintenance technicians, operating personnel, engineers, and project managers in the field and in industry.



With its diverse functions, it offers the right support in every situation. You can contact a subject matter expert via videoconference or transmit important data about the device status for diagnostic purposes. The two variants, SIPIX MO ZN and SIPIX SD ZN, give you the possibility to choose the service level that suits your needs:

- The SIPIX MO ZN can be used to establish an internal real-time audio/video connection to an in-house expert via the integrated web server. An Internet connection, as with similar audio/video conferencing solutions, is not mandatory.
- The SIPIX SD ZN is based on the SIPIX MO and is complemented by the connection to the secure high-availability Siemens Remote Platform cRSP. This gives you access to the centrally available expertise of the SIEMENS Service Center at any time and from any location, and also allows you to integrate your own and third-party experts. The standard application here is remote access to field devices via the Simatic PDM software. By adding compatible third-party tools to the SIPIX SD ZN, it is also possible to access other service items in a system.

Two independent VPN channels enable the remote expert and the on-site service technician to exchange information either by desktop sharing or by transmitting a real-time video stream. Among other things, communication via audio, live chat, drawing of notes on the camera image (AR functions), etc., are also possible. This allows the remote expert to conveniently and easily guide the on-site expert through the service process.



Modern interfaces enable the exchange of information with other devices in your company system. The device communicates wirelessly via Wi-Fi and Bluetooth. To optimize its use in industrial environments, the powerful 10.1 inch tablet PC can be combined with a wide range of accessories. For example, the connection of data glasses enables a service technician to work hands-free on field devices or other service objects. The selective switch between the tablet and glasses view creates optimal conditions for assisted work.



Highlights

- Real Time Audio/Video Collaboration (SIPIX RC) pre-installed as decentralized web server
- High robustness (military specification MIL-STD-2106)
- Encrypted end-to-end communication
- High availability of the Siemens Remote Platform cRSP (99.99%)
- Certified in accordance with TÜV/CERT
- Functionally extendable (e.g., by using data goggles)

Advantages

The use of the SIPIX SD series offers various advantages, both for the expert with remote access and for the service technician onsite:

- Secure remote access to the SIPIX SD ZN
- An on-site service technician without specific knowledge of process instrumentation can be supported in a timely manner by a remote expert.
- Several experts can simultaneously access a SIPIX MO/SD ZN via Desktop Sharing
- Training of a service field engineer aided by an expert during the service assignment (training on the job).

2.1.2**Characteristics**

The following table contains an overview of the features:

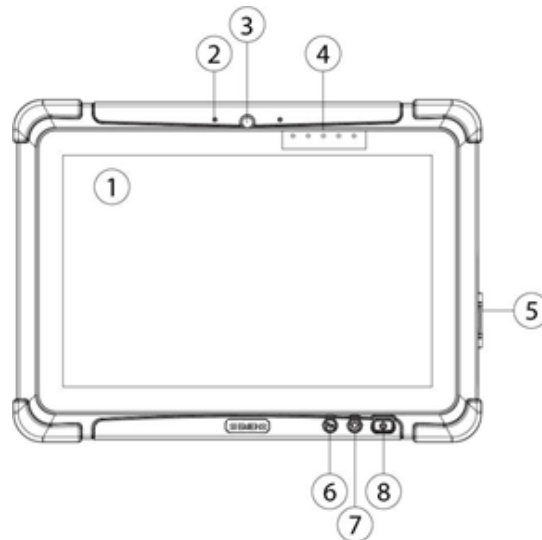
Configuration	Execution
Display	10.1" with 1920 x 1200 pixel resolution
Processor	Intel® Pentium N4200 1.10 GHz, up to 2.50 GHz with Turbo Boost technology
Working memory	4 GB LPDDR4 (up to 8 GB)
RAM	128 GB SSD Expandable up to 512 GB through Micro SDXC Card Slot
Graphic	Intel® HD Graphics 504
Operating system	Windows 10 Enterprise LTSC (64-bit)
WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 5.0
GNSS	GPS, GLONASS
WWAN	Optional 4G/ LTE or 3G

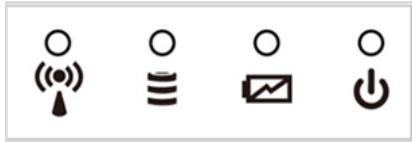
Detailed information can be found in the "Technical data" section.

2.1.3 Structure of the Tablet





In this section, you will find a component description.

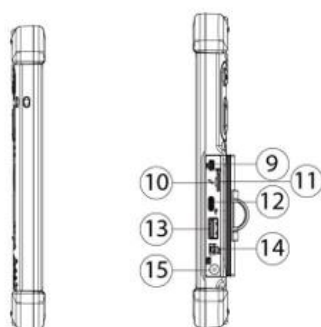
Front



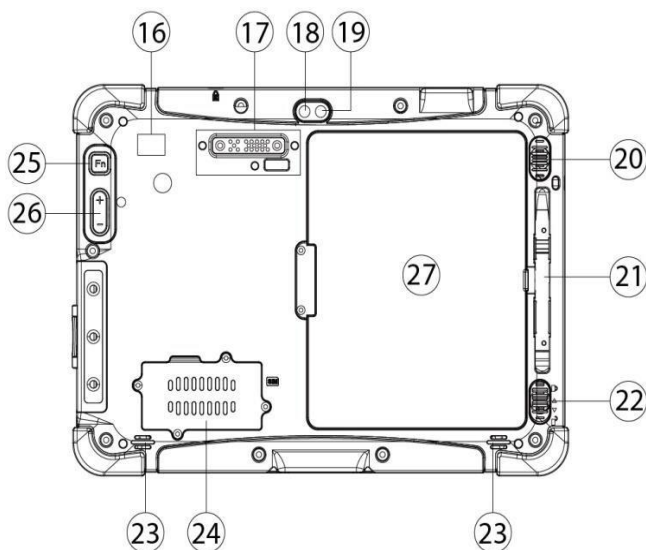
Position	Name	Description
1	10.1" Touch screen	Display
2	Digital microphone with noise reduction	Use in video recording and communication
3	Front camera	2 megapixel webcam
4	LED indications	<p>The LED indicators show the following status: RF communication, memory, battery status, power status.</p> 
5	I/O cover	I/O port protection
6	Fn1	Programmable function
7	Menu key	HotTab quick access
8	On/off button	Switches the tablet on/off

LED indicators

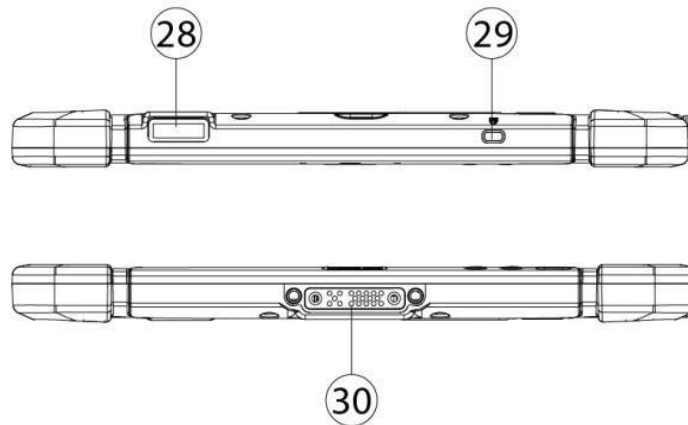
Icon	Name	Description
	RF communication	Green – Wi-Fi/BT/WWAN/GPS enabled
	Hard disk activity indicator	Flashing green – hard disk activity No light – Hard disk idle
	Battery level	Orange: AC adapter is plugged in and charging. Flashing green: AC adapter is plugged in and the battery is fully charged. Red: Low battery level (<10%) Red flashing: Battery is replaced during operation. No light: Battery is in use and battery level >10%
	Status indicator	Blue: The tablet is switched on No light: Tablet is OFF

Left and right side

Position	Name	Description
9	Micro HDMI	HDMI output to external display/screen
10	Clear CMOS	Hardware reset button
11	MicroSD Card Reader	Port for MicroSD cards
12	USB 3.0 Type C	High-speed USB port for connecting USB devices, such as USB flash drive, mouse, keyboard, printer, etc.
13	USB 3.0 Type A	The USB 3.0 port is used to connect USB devices such as USB drive, mouse, keyboard, printer, external camera, etc.
14	Microphone input/Line out	Connector for headset or headphones (microphone is only supported for a 3.5 mm 4-pin headset)
15	Power connection	Connection for DC power supply

Back side

Position	Name	Description
16	RFID Reader	RFID reader for reading RFID tags
17	Additional port	Connections to additional devices possible (USB2.0 x 1, RS232 x 1).
18	Camera flash	LED camera flash
19	Rear camera	8MP autofocus camera. Takes photos and videos.
20	Battery eject slider	Slider to open the battery slot.
21	Slot for the stylus	Storage for the stylus
22	Battery lock slider	Locking the battery after inserting it.
23	Loudspeaker	Audio output
24	3G/LTE Module/SIM card slot	Service window for inserting the micro-SIM card. Also allows access to the 3G /LTE module.
25	Fn2 key	Programmable function key
26	Button for brightness/volume control.	Brightness/volume control. (+) Up, (-) Down.
27	Battery	7 Standard battery: 7.4 V, typ. 5140 mAh Li- Polymer battery (2S1P) Long-term battery: 7.4 V, typ. 10280 mAh Li-Polymer battery (2S2P, optional as accessory)

Upper and lower side

Position	Name	Description
28	Barcode (optional)	Barcode scanner for reading 1D/2D barcodes
29	Kensington lock	Connection for Kensington lock.
30	Docking plug	Docking port

2.2 Scope of Delivery

Hardware

The following components are included in the scope of delivery:

- 1x SIPIX MO/SD ZN Tablet PC:
- 1 x Lithium polymer battery, type BS101
- 1 x stylus
- 1 x hand strap
- 1 x charging power supply
- 1 x charging power supply (EU)
- 1 x charging power supply (US)
- 1 x spare cover for interface
- 1x manual
- 1 x short manual with safety instructions
- VR Glasses (Optional)

On-board software components

The pre-installed software components and their settings are optimally matched, so that they are executable together on your system. This is verified in particular through system testing and is ensured throughout the entire life cycle.

The following software components are pre-installed on the SIPIX SD ZN:

- SIPIX RC:
Video/audio collaboration app
- SIMATIC PDM
Configuration tool for field devices
- Tight VNC
Desktop sharing software
- cRSP SSL VPN
Client for connection to Siemens remote platform
- Registration at the Siemens Remote Platform cRSP (SIPIX SD ZN only)

2.3 Warranty



WARNING

No changes or conversions may be carried out without the written permission of SIEMENS AG.

If unspecified components are used, explosion protection is no longer guaranteed. It cannot be guaranteed that externally procured parts have been designed and manufactured in a way that meets the load and safety requirements.

Before modifications or conversions, contact manufacturer and obtain approval. Only use original spare and wear parts.

Note

SIEMENS AG assumes the complete warranty only and exclusively for the spare parts ordered from SIEMENS AG.

In principle, our "General Terms and Conditions of Sales and Supply" apply. These are available to the operator at the latest since conclusion of the contract. Warranty and liability claims for personal injury and damage to property are excluded if they are attributable to one or more of the following causes:

- Improper use of the Tablet PCs.
- Improper handling.
- Not observing the instructions in the user manual and the brief instructions regarding transport, storage, commissioning, operation and maintenance.
- Arbitrary structural changes.
- Incorrectly performed repairs.
- Disasters caused by foreign bodies and force majeure.

3 Safety Information

3.1 General Safety Information

- Do not change or charge a battery in a potentially explosive area.
- General legal regulations or directives on occupational safety, accident prevention regulations, and environmental protection laws must be observed, such as the operational safety ordinance (BetrSichV) or applicable national regulations.
- Wear suitable clothing and footwear in view of the risk of dangerous electrostatic charges.
- Avoid heat effects outside the specified temperature range.
- Protect the device from external influences! Do not expose the unit to corrosive liquids, vapors or spray mist!
- In the event that the device malfunctions or the housing is damaged, immediately remove it from the potentially explosive area and move it to a safe place.

3.2 Notes on this User Manual

Read carefully before commissioning the devices:

The user manual contains important notes, safety instructions and test certificates required for the proper functioning of the device during operation.

The user manual is intended for all persons involved in the commissioning, handling and maintenance of the product. When carrying out this work, the applicable directives and standards for areas with gas and dust atmospheres (99/92/EG, EN 60079-17, EN 60079-19, IEC 60079-17, IEC 60079-19) must be observed.

Knowledge of the safety and warning instructions in this user manual and their strict observance are essential for safe commissioning and handling. Accidents, injuries and damage to property can be avoided by careful handling and consistent adherence to the instructions.

The illustrations in this user manual are intended to illustrate the information and descriptions. Due to the different requirements of the respective application, SIEMENS AG cannot assume any responsibility or liability for the actual use of the products on the basis of these examples and illustrations.

SIEMENS AG reserves the right to make technical changes at any time.

SIEMENS AG is under no circumstances responsible or liable for indirect or consequential damages resulting from the use, application or application of this user manual.

3.3 Intended Use

3.3.1 Exclusive Purpose of Use

The tablet PC series SIPIX MO/SD is a hand-held electrical device and is designed for mobile receiving, processing, and/or transmission of data within hazardous areas.

The permissible operating data of the device used must be observed.

3.3.2 Unapproved Use

Any other use is not intended and can lead to damage and accidents. The manufacturer is not liable for any use beyond the exclusive purpose.

3.4 Obligations of the Operator

The operator undertakes to only allow persons to work with the Tablet PCs who:

- are familiar with the basic safety and accident prevention regulations and have been instructed in the use of the Tablet PC,
- have read and understood the documentation, the safety section and the warnings.

The operator checks that the safety and accident prevention regulations valid for the respective application are complied with.

3.5 Essential Health and Safety Requirements

Contact your local health and safety representative to ensure that you are familiar with your company's safety regulations to protect employees in the workplace.

Ergonomic Recommendations

Consider the following recommendations for daily work at the workplace:

- Avoid unilateral, repetitive movements.
- Posture should be neutral.
- Avoid using up a lot of energy.
- Keep objects that are frequently used in the functional reach space.
- Adjust the working height to the body size and type of work.
- Sufficient space must be provided for body movements.
- Set up objects so that they do not oscillate.
- Avoid applying direct pressure.
- Pay attention to adjustable tables and seats.
- Make sure you have a suitable working environment.
- Workflows should be optimized.
- When performing repetitive tasks, switch between the left and right hand as often as possible.

3.6 Safety Instructions for Operation

Maintenance

For electrical systems, the relevant installation and operating regulations must be observed (e.g., RL 99/92/EG, RL 94/9/EG, Industrial safety regulations or the nationally applicable regulations EN 60079-14, IEC 60079-14 and the DIN VDE 0100 series).

Observe the national waste disposal regulations for disposal.

Maintenance

If the unit is operated correctly, in compliance with the installation instructions and surrounding conditions, no continuous maintenance is required.

See Section [7](#).

Inspection

According to EN/IEC 60079-17 and EN/IEC 60079-19, the operator of electrical systems in potentially explosive areas is obliged to have them checked for proper condition by a qualified electrician.

Repairs

Repairs to explosion-proof equipment may only be carried out using original spare parts in accordance with the state of the art, manufacturer's specifications and through authorized experts. The applicable directives must be observed.

Commissioning

Before entry into service, make sure that all components and documentation are available.

3.7 Safety Instructions for the Battery Pack

- Do not disassemble, modify, or insert sharp objects into the battery pack. This could result in electrolyte leakage, intense heat generation, ignition, or failure.
- Do not short the positive (+) and negative (-) terminals of the battery. This could result in severe heat generation, ignition, or failure. When carrying or storing the device, do not place the battery pack with objects that are sensitive to electricity.
- Do not subject the battery to shocks by dropping or strong pressure. This could result in electrolyte leakage, intense heat generation, ignition, or battery failure.
- Only charge the battery in the manner described in this manual. Failure to charge the battery as described herein could result in electrolyte leakage, excessive heat generation, ignition, or failure.
- If the battery pack is damaged, it must be replaced with a new battery. Continued use of a damaged battery may result in excessive heat generation, ignition, or battery failure.
- Do not expose the battery pack to overheating or intense heat (e.g., next to an open fire, direct sunlight). This could result in severe heat generation, ignition, or failure.
- Do not use the battery pack with other products. The battery pack is rechargeable and intended only for this specific product. If used with another product, it may cause electrolyte leakage, intense heat generation, ignition, or failure.
- Do not operate the product with batteries other than the specified type.
- Immediately take the device out of operation if the battery swells or looks swollen or defective. Do not attempt to recharge the battery or continue to use the device. Damaged or leaking batteries must not be used. Do not allow leaking battery fluid to come into contact with eyes, skin, or clothing.

4 Commissioning

4.1 Preparation

Unpack delivery unit

Please observe the following points when unpacking:

- It is advisable not to dispose of the original packing material. Keep it in case you need to transport it again.
- Keep the enclosed documentation provided with the delivery. They are required for initial commissioning and are part of the product.
- Before unpacking, check whether the security seal is intact. Please contact Technical Support if the seal is broken.
- Check the packaging and the package contents for visible transport damage.
- Check the delivery for completeness (see section on "Scope of Delivery").
- Inform your local Siemens sales point of any transport damage or irregularity you may notice.

Check delivery unit before operation

Before putting the device into operation, check for the following requirements:

- Is there no damage to the display, scanner window and housing?
- Are all covers closed as prescribed?
- Is the battery correctly inserted and locked?
- Is the micro SD card specified for the Tablet PC?
- Is the SIM card inserted correctly?

4.2 Charging the Tablet PC

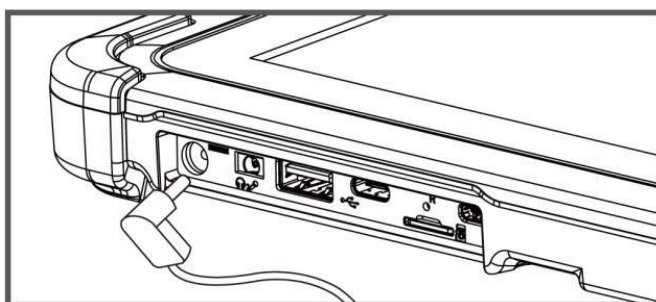
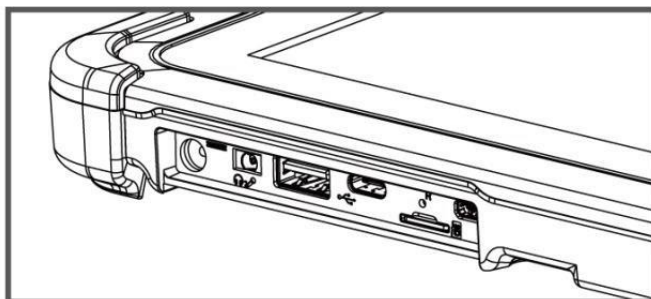
The tablet can be powered either by AC supply voltage or via a battery. When switching on the tablet for the first time, it should be connected to an AC supply voltage until fully charged (battery LED indicator lights up green).

CAUTION

Use only the AC adapter supplied with the tablet PC. Using other AC adapters may damage the tablet PC and the battery.

To connect a tablet to the AC network:

1. Open the I/O protection cover by pulling the latch.
2. Plug the DC cable of the AC adapter into the connector socket of the tablet PC.
3. Plug the AC power cord into the AC adapter.
4. Plug the AC power cord into the AC outlet.



The LED display of the battery shows different states:

Color/Light	Description
Orange	The AC adapter is plugged in and the battery is charging.
Green	The AC adapter is plugged in and the battery is fully charged.
Continuous red light	Battery level low (<10%)
Flashing red	Battery is replaced during operation
No light	Battery is in operation and charged (>10%)

Battery operating and charging time

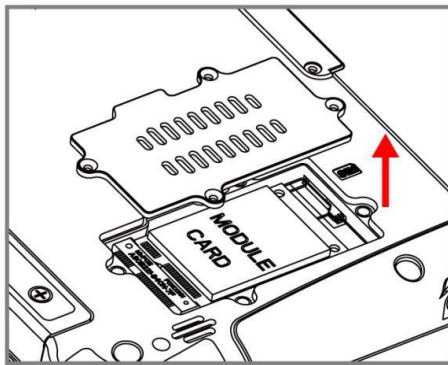
Battery	Battery operation time	Battery charging time
Standard battery (BS101)	9 hours	2.5 hours
High-power battery (BL101)	16 hours	4.5 hours

4.3 Installing a SIM card (Optional)

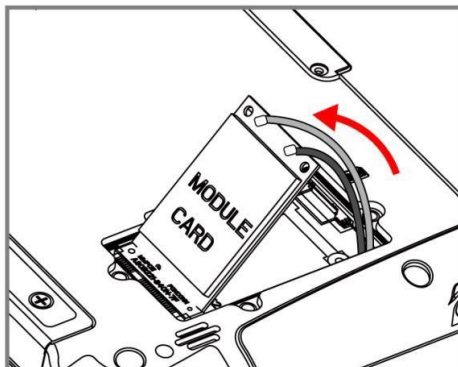
Insert SIM card (for devices with 3G/LTE)

The SIPIX supports 3G/LTE data connection and can accept a micro-SIM card.

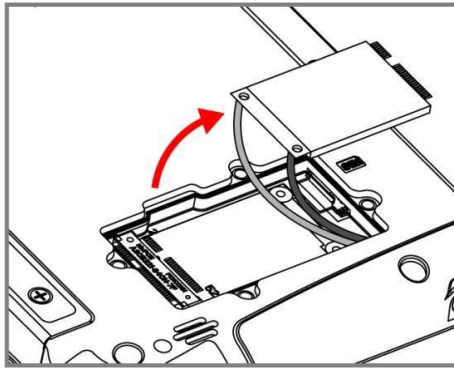
1. Remove the four screws and remove the service window.



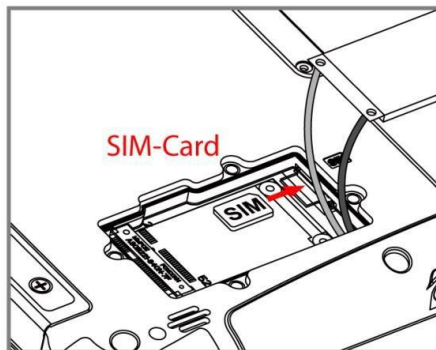
2. Remove the screw securing the 3G/LTE module. Carefully lift out the module. Ensure that the connected cables are not damaged!



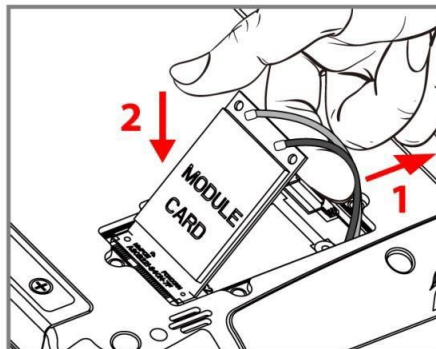
3. Carefully release the 3G/LTE module from its locked position to the right. Do not disconnect any cables!



4. Insert the SIM card. Chip/contact face down.

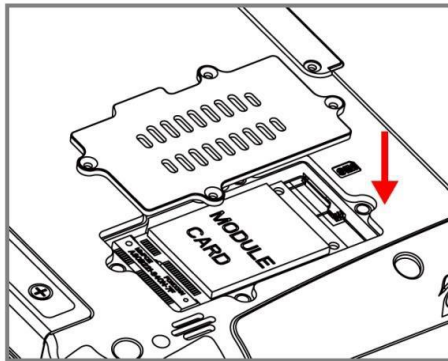


5. Carefully pull the cable out of the module card compartment manually to prevent the cable from being crushed when the module card is reinserted.



6. Replace the 3G/LTE module and tighten the screw. Ensure that the cables are routed correctly. Do not bend the cables! Do not crush/trap the cable!

7. Replace the service window and secure it with the four screws.



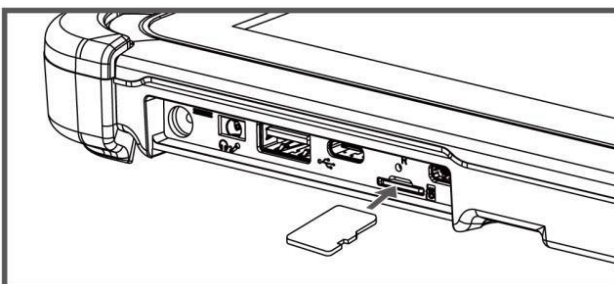
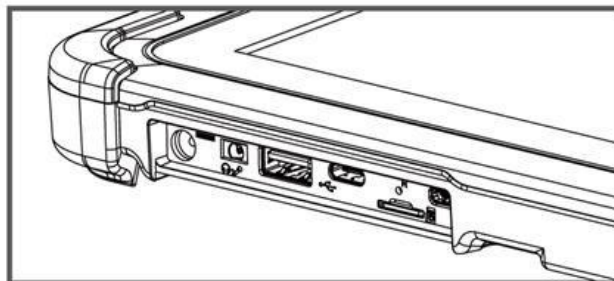
CAUTION When reinserting the 3G/LTE module, ensure that the cable is routed correctly. Ensure that the cable module is not squeezed.

Insert micro SD card

The SIPIX supports additional memory with an optional microSDXC card slot.

To install a microSD card:

1. Open the I/O protection cover by pulling the latch.
2. Insert the microSD card into the slot with the contacts facing down.
3. Press the card inward to ensure it is seated properly.
4. Close the I/O protection cover.

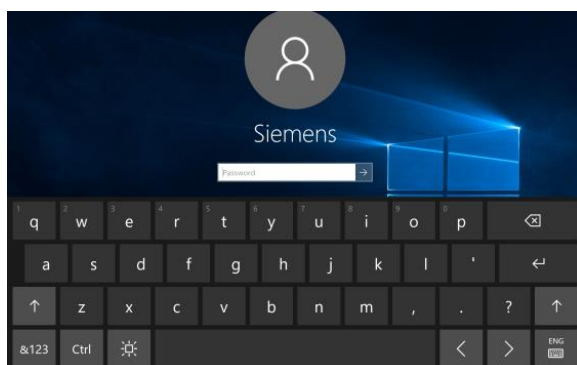


To remove the microSD card:

1. Open the I/O protection cover by pulling the latch.
2. Press the microSD card inwards to unlock it.
3. Pull the microSD card out.

4.4 Starting the SIPIX MO/SD ZN

1. To switch on, press and hold the on/off button until the LED (1) lights up. When the tablet is booted, the Windows login is displayed.
2. Click on the text box and enter the default login password "Siemens" using the on-screen keyboard.



3. Confirm the entry with "Enter".

Note

Immediately after first entry into service, change the Windows login password.


Note

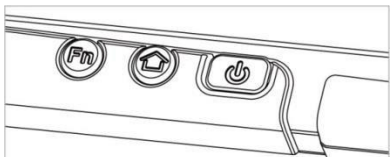

If you use a SIM card, a SIM card password may be requested, if necessary, after the Windows login.

5 Basic operation of the SIPIX MO/SD ZN





5.1 Overview of HotTab

The HotTab menu provides quick access to tablet settings and features, such as setting up shortcuts, using the camera, turning integrated devices on and off, programming function keys, and changing power management.

To display the HotTab function, press the menu button  on the front panel or launch the HotTab application.

(Menu) button on the front panel	HotTab program icon
	

The main user interface contains the following functions:



Icon	Name	Description
	Shortcuts	This allows you to configure keyboard shortcuts for quick access to programs with just a few keystrokes.
	Camera	You can use it to take a picture or record a video.
	Device ON/OFF	Enables/disables the hardware functions of the tablet PC. Configurable features include Wi-Fi, WWAN (3G/4G/LTE), GPS, Bluetooth, camera, LED indicators, RFID reader, and GPS antenna routing.
	Settings	This function provides user-specific information (e.g., PC data, battery status), as well as device settings such as power management and function key assignment.

5.1.1 Using Shortcuts




The HotTab shortcuts menu provides a user-friendly interface for setting up software shortcuts and allows users to quickly access programs with a quick tap. The Shortcuts menu offers 8 empty memory locations for storing user access data. The shortcuts can be linked to any executable file (.exe) on the tablet.




Save a new keyboard shortcut

1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Shortcuts" button.
3. Press the  icon next to an empty memory location.
A file browser opens.
4. Browse the files until you find the application you want to set up a shortcut for.
5. Save the shortcut with "Open".

Remove a saved keyboard shortcut

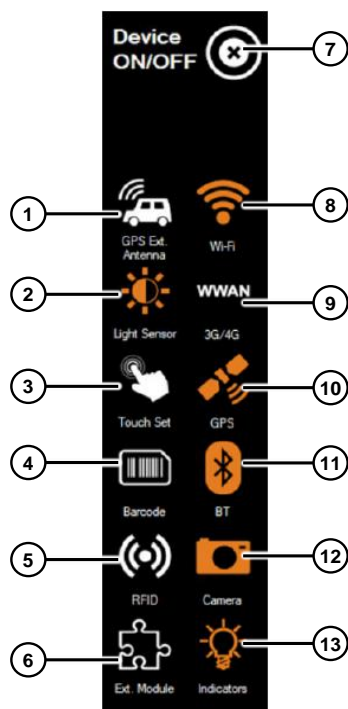
1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Shortcuts" button.
3. Press the  button of the desired memory location to be removed.
4. The shortcut is removed and "Empty" is displayed again next to the empty memory location.
5. Pressing the  button hides the HotTab menu.

Using HotTab shortcuts

1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Shortcuts" button.
3. Press the saved shortcuts to access the corresponding programs.

5.1.2 Switching the Hardware Functions On and Off

In the "Device On/OFF" menu, you can enable hardware capabilities or disable them.



Position	Description
1	External GPS antenna On/Off
2	Light sensor On/Off
3	Touch settings
4	Barcode reader On/Off
5	RFID On/Off
6	Extension port active/inactive
7	Terminate "Device ON/OFF"
8	Activate/deactivate Wi-Fi
9	Activate/deactivate WWAN
10	Activate/deactivate GPS
11	Activate/deactivate Bluetooth
12	Activate/deactivate camera
13	Enable/disable indicators


Note


White icon = off/disabled

Orange icon = on/enabled

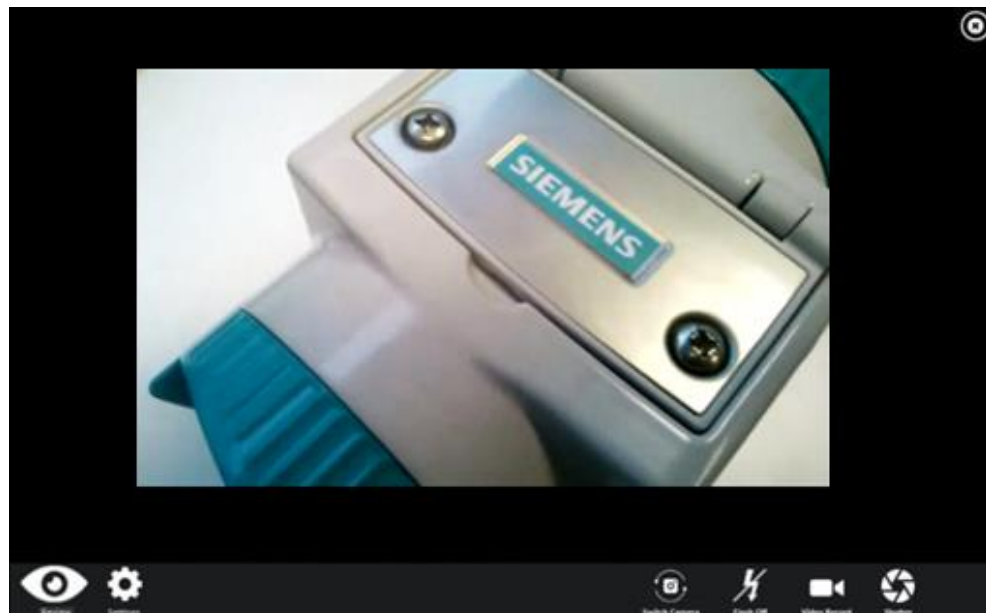
5.1.3 Using the Camera

In the "Camera" menu, you can record videos and images and change camera settings.








1. Open the HotTab menu by pressing  on the front panel.
2. Press "Device ON/OFF" to see the status of the built-in devices.
3. Check the display color of the camera icon:

Element	State color	Description
 Camera	Orange	Camera is activated.
	White	Camera is deactivated.

4. If the camera is deactivated, it can be activated by pressing the camera symbol (orange).
5. Return to the main menu by pressing the menu button or by clicking on the back arrow at the top.
6. Press the camera icon to open the camera menu.



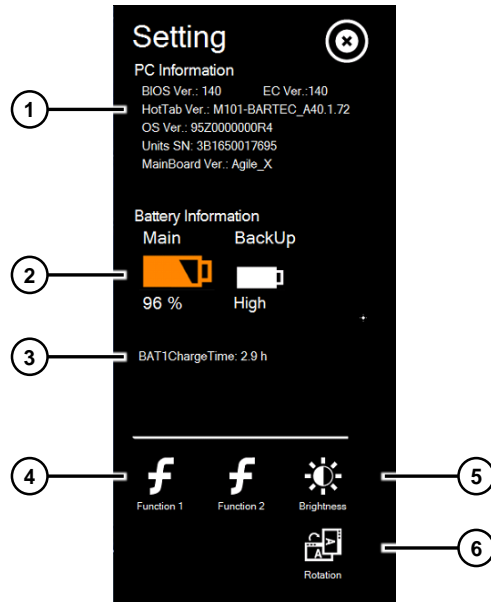
The following functions are available:

Icon	Element	Description
	Check	Check
	Settings	Opens the camera settings page. Possible settings: <ul style="list-style-type: none"> - Picture Save: Change/check storage location for images. - Video Save Folder: Change/check storage location for video recordings. - Picture Quality: Image compression quality
	Camera switch	Switch between front and rear camera.
	Flash	Enables/disables LED flash during image capture.
	Video recording	Tap to start recording; tap again to stop recording.
	Camera aperture	Button for the camera shutter. Tap to take a picture.
	Exit	Exits the camera menu and hides the HotTab application.

5.1.4 Customizing the settings

In the "Settings" menu, you can find information about the installed HotTab version and the battery status of the tablet, among other things.

Click the "Settings" icon to access the "Settings" menu.



- (1) PC information (BIOS, HotTab version, serial number, etc.)
- (2) Remaining capacity for main and back-up battery
- (3) Expected recharge time for main battery
- (4) Assignment of the function keys (Fn1 and Fn2)
- (5) Brightness settings display
- (6) Alignment display

Assignment of the function keys of the tablet (Fn1 and Fn2)

There are two variants regarding the use of the two function keys "Fn1" and "Fn2":

- Short Press
- Long Press

Both settings can be simultaneously active.

1. Click on the "Function 1" (4) icon to assign the "Fn1" function key.
2. Click on the "Short Press" icon.
3. Click the icon of the application you wish to assign to the button.

If you want to link your own application, click on the "Magnifying glass" under the "Customize" icon and select the desired application.


4. Click on the "Long Press" icon.
5. Click the icon of the application you wish to assign to the button.
6. Press the "FN1" function key. Opens the previously selected application for "Short Press".
7. Hold the "Fn1" button for approx. 3 secs. Opens the previously selected application for "Long Press".


The assignment of function key "Fn2" is identical.

5.2 Establishing a wireless connection

5.2.1 Working with Wireless LAN (Wi-Fi)

To use the wireless LAN (Wi-Fi) function to connect to the network, follow the steps below:


1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Device ON/OFF" button.
3. Check the display color of the Wi-Fi icon:


	Status	Description
 Wi-Fi	Orange	Wi-Fi is enabled
	White	Wi-Fi is disabled

4. If the Wi-Fi function is deactivated (white), it can be activated by tapping on the Wi-Fi icon can be activated (orange).
5. Click the network connection status icon in the Windows notification area. A list of available networks is displayed.
6. Double-click a network to establish the connection. If necessary, enter the required authentication data.
7. You can check the connection status with the network connection status icon in the Windows notification area. The more bars the icon displays, the better the Wi-Fi connection strength.
8. The Wi-Fi connection is now set up, try connecting to the network using an internet browser such as Internet Explorer.

5.2.2 Working with Wireless WAN (3G/LTE)

The tablet PC supports data connectivity with 3G/LTE modules and can accept a micro-SIM card. (Note: 3G/LTE function is optional).


1. Insert a SIM card (see Section [4.3](#)).
2. Open the HotTab menu by pressing  on the front panel.
3. Press the "Device ON/OFF" button.
4. Check the display color of the WWAN icon:


	Status	Description
	Orange	WWAN (3G/4G) is enabled.
	White	WWAN (3G/4G) is disabled.

5. If the WWAN function is deactivated (white), it can be activated by pressing the WWAN icon (orange).
6. You can check the WWAN connection status using the network connection status icon in the Windows notification area. The more bars that are displayed, the better the signal.

5.2.3 Working with GPS

To activate the GPS:


1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Device ON/OFF" button.
3. Check the display color of the GPS icon:


	Status	Description
	Orange	GPS is enabled.
	White	GPS (3G/4G) is disabled.

4. If the GPS function is deactivated (white), it can be activated by pressing the GPS symbol (orange).
5. The GPS function can now be used with an application that uses GPS.

5.2.4 Working with Bluetooth

To enable Bluetooth:


1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Device ON/OFF" button.
3. Check the display color of the Bluetooth icon:

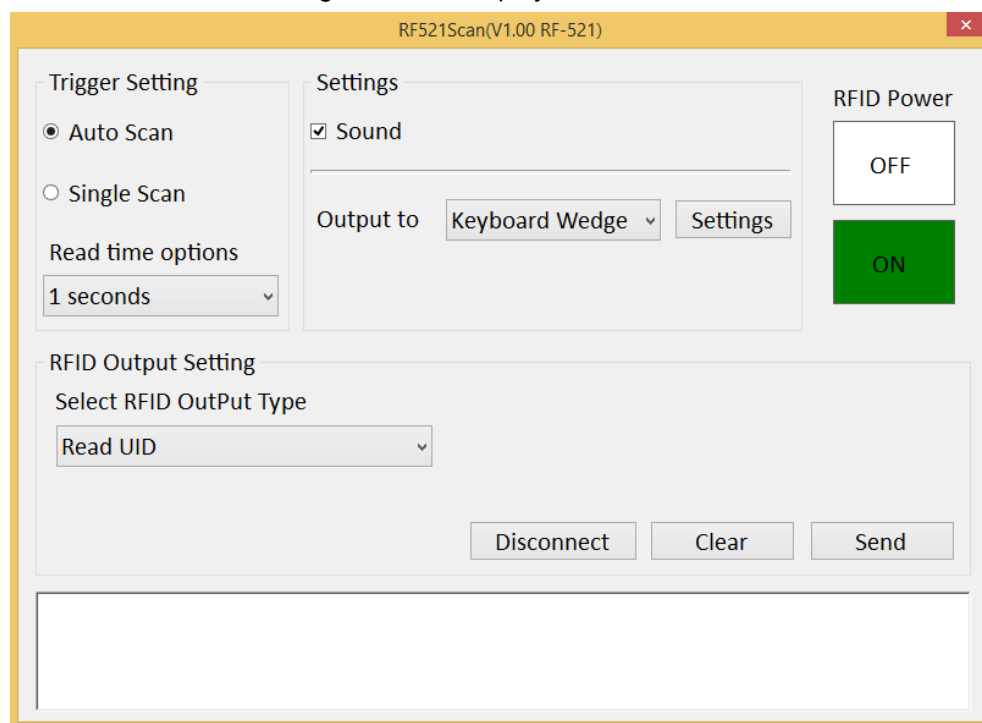
	Status	Description
 BT	Orange	Bluetooth is activated.
	White	Bluetooth is disabled.

4. If the Bluetooth function is deactivated (white), it can be activated by pressing the Bluetooth symbol (orange).
5. Click the Bluetooth icon in the Windows notification area. A context menu for Bluetooth is displayed.
6. To add a device, press Add Bluetooth Device. Windows automatically searches for Bluetooth devices.
7. Select the Bluetooth device to be connected and follow the on-screen instructions to continue the process and use the Bluetooth device.


5.3 Using the HF RFID Reader

To activate the HF RFID reader, proceed as follows:

1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Device ON/OFF" button.
3. Press RFID, the setting window is displayed as follows:



4. Press the ON button.
5. Check that the ON icon is green and the RFID icon in the HotTab menu is orange at the same time.

	Status	Description
 RFID	Orange	The HF RFID reader is activated.
	White	The HF RFID reader is deactivated.


Disconnect


By pressing the "Disconnect" button, the connection to the integrated HF RFID reader is disconnected.

To reconnect, turn the module off in the settings and then turn it on again.

5.4 Switching the External GPS Antenna On/Off

To enable/disable the external GPS antenna:


1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Device ON/OFF" button.
3. Check the display color of the external GPS antenna icon:


	Status	Description
 Ext. GPS antenna	Orange	Ext. GPS antenna is activated, external antenna can be used
	White	Ext. GPS antenna is deactivated, internal antenna is used

4. If the external GPS antenna is disabled (white), press the external GPS antenna icon to enable it (orange).

5.5 Activating/deactivating the Brightness Sensor for Display Contrast Adjustment




The brightness sensor can be switched on and off in the HotTab menu. To activate/deactivate the brightness sensor, proceed as follows:

1. Open the HotTab menu by pressing  on the front panel.
2. Press the "Device ON/OFF" button.
3. Check the display color of the brightness sensor icon:

	Status	Description
 Brightness sensor	Orange	Brightness sensor is activated.
	White	Brightness sensor is deactivated.

5.6 Changing the Touch Screen Operation Mode

The tablet PC supports three integrated operating modes for different use cases:

Operating mode	Description
 Hand/Rain (default)	In Hand/Rain mode, incorrect entries made by liquid drops on the touchscreen are rejected. When the liquid is removed, the touchscreen accepts input from bare fingertips. The input is supported with: <ul style="list-style-type: none"> - Active stylus with Palm Rejection (palm is ignored) - Passive stylus with rubber tip - Bare fingertips
 Pen	In Pen mode, the touchscreen supports input with the passive capacitive fine-tip stylus (included with the tablet). The input is supported with: <ul style="list-style-type: none"> - Passive stylus with fine tip and palm rejection (palm is ignored) - Active stylus with Palm Rejection (palm is ignored) - Passive stylus with rubber tip - Bare fingertips
 Glove	In glove mode, the touchscreen supports inputs that the user makes with gloved fingers. The input is supported with: <ul style="list-style-type: none"> - Glove - Passive stylus with rubber tip - Bare fingertips


5.6.1 Toggle touchscreen mode

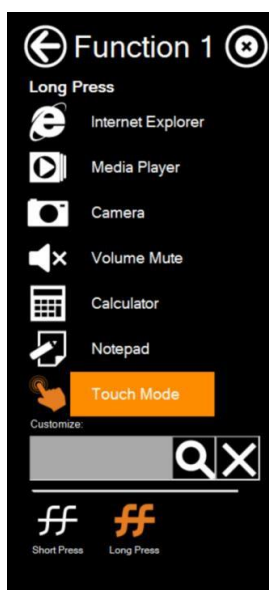
To switch the touch screen mode, proceed as follows:

1. Open the HotTab menu by pressing  on the front panel.
2. Select "Device ON/OFF" and then click the "Touch Set" icon.
3. The "Touch Mode" selection function appears as shown below.
4. Select the desired mode under "Touch Mode" by enabling the checkbox

5.6.2 Switching via programmable function keys

To switch between the different touchscreen modes using the programmable function keys, first ensure that touchscreen switching is set using the programmable function keys.

1. Open the HotTab menu by pressing  on the front panel.
2. Press "Settings".
3. Press the F1 icon.
4. Press the "Long Press" icon.
5. Switch to "Touch Mode" using the Long Press function as shown below:



Once the touchscreen switching is set with the programmable function keys, press and hold function key F1 to scroll through the different touchscreen modes. When touchscreen mode is switched, an icon is briefly displayed at the bottom center of the screen to indicate the current mode.

6 Remote Assisted Work

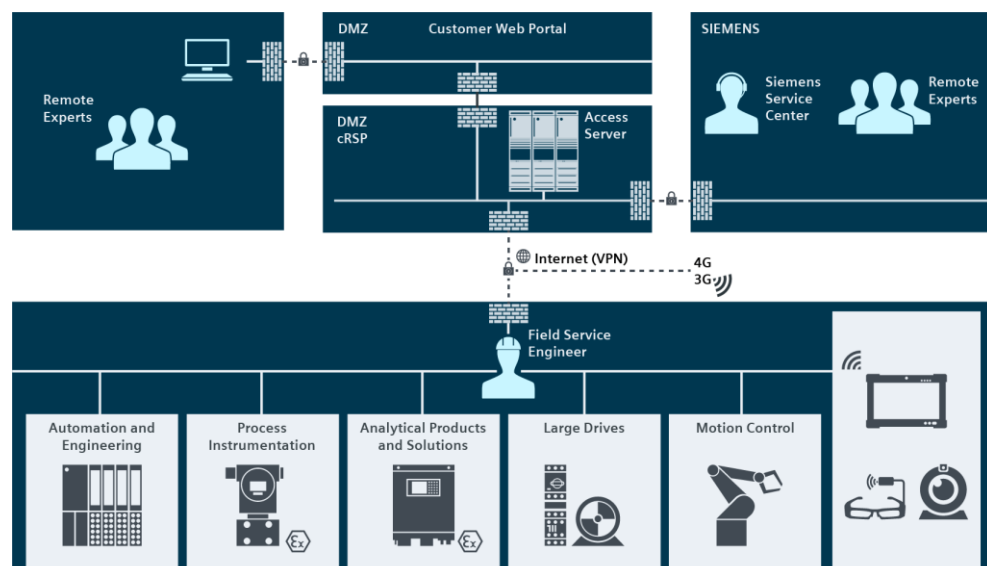
In Remote Assisted Work, two specific digital work tools are available:

- **Audio/Video conference**
With SIPX, real-time video transmission as well as communication via audio and a live chat is possible via a secure VPN tunnel. For example, drawing notes on the camera image (AR functions) guides the on-site service technician through the service process.
In addition, the use of data glasses allows hands-free work on field devices by displaying text or transparent images in the service technician's field of vision or by following the expert's instructions via audio.
- **Desktop Sharing**
Desktop sharing gives the remote expert full access to the SIPIX Service Tool. In addition, data can be transferred to and from the SIPIX Service Tool in a secured manner.

6.1 Remote Service Platform (cRSP)

The Remote Service Platform (cRSP) from Siemens is used for remote assisted work. Compared to a traditional point-to-point connection (P2P), communication via cRSP offers significant advantages:

- The graduated security and access concept contains all aspects for secure and monitored communication
- Reduction of the administrative effort through central administration of all system accesses
- Central monitoring, logging, and reporting with continuous monitoring by the customer
- Non-reactive due to separation of the different networks (DMZ)
- Compatible with general Industrial Security concepts
- Certified according to TÜV/CERT



6.2 Communication with an In-House Expert (SIPIX MO/SD ZN)

With the SIPIX MO/SD ZN tablet, you can establish a remote connection and communicate with an expert (e.g., during a service call). There are the following two possibilities:

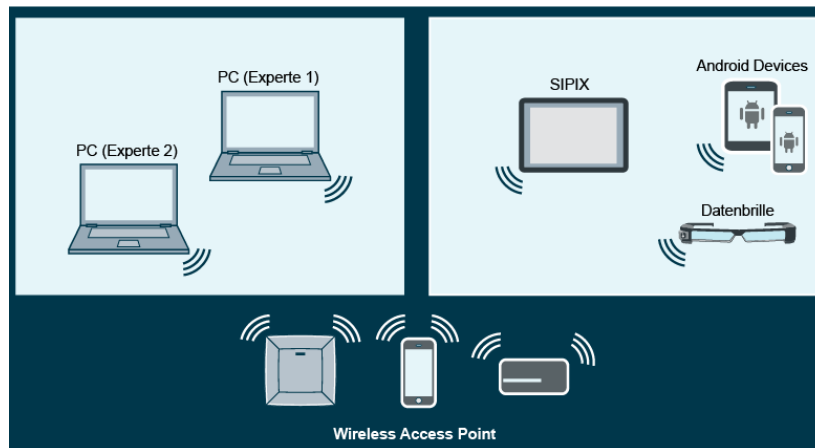
- Communication without internet connection within the company network (Intranet)
- Communication via the Customer Web Portal (Internet)

6.2.1 Communication without Internet Connection within the company network (Intranet)

Communication without an internet connection is done in a local company network, for example, via a wireless access point (Wi-Fi router, smartphone, or LTE router) similar to a network printer.

After the pre-installed decentralized web server application (SIPIX RC) has been started on the SIPIX Tablet, it can be accessed from any other client PC in the same network. All you have to do is to enter the IPv4 address of the SIPIX Tablet in the browser of the client PC, which establishes a point-to-point connection between the expert or operator PC and the SIPIX tablet.

Subsequently, the expert or the operator from the maintenance room can directly see a view of the technician on site via camera transmission with the SIPIX Tablet and provide support if required. If necessary, the onsite technician can also pass the camera transmission on directly to other devices with an Android operating system during the ongoing connection (e.g., data glasses or a smartphone), in order to either be able to work with both hands or to better reach service items that are difficult to access.



6.2.1.1 Overview of steps

Communication proceeds in the following steps:

	Expert (PC)	Field Service Engineer (Tablet)
1	Connect PC to the established wireless access point	Prepare SIPIX MO/SD ZN: <ul style="list-style-type: none"> - Start - Connect to the established wireless access point - Start the "SIPIX RC" application
2	<ul style="list-style-type: none"> - Find the IPv4 address of the SIPIX Tablet in the internal network - Enter the IPv4 address of the SIPIX Tablet in the browser as follows: https://xxx.xxx.xxx.xx:5001 - Establish a remote connection to the tablet 	Start audio/video conference
	Start desktop sharing <ul style="list-style-type: none"> - Launch "TightVNC" software - Connect to the tablet 	Accept desktop sharing

6.2.1.2 Setting up a Wireless Access Point

To establish a connection between a local expert PC and the SIPIX Service Tool, the existing company network can be used. If this is not possible due to the company's IT requirements, you can set up a stand-alone simple wireless access point via a Wi-Fi router, a smartphone hotspot, or a Wi-Fi LTE router. An internet connection is not necessary.

6.2.1.3 Preparing SIPIX MO/SD ZN

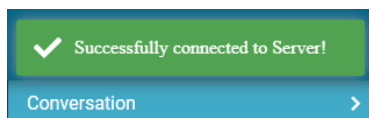
1. Start the tablet.
2. Connect the tablet to the access point you have set up. Information on this can be found in the Section [5.2](#).
3. Double-click the "SIPIX RC" icon on the tablet's home screen to launch the application.



The web page "SIPIX RC Remote" will be opened automatically in the "Chromium" browser. Since the web server application is started in the background, it may take a few minutes before the browser is launched.

6.2.1.4 Establishing a Connection Between an Expert PC and SIPIX MO/SD ZN

1. Set up a wireless access point using a Wi-Fi router, smartphone hotspot, or Wi-Fi LTE router.
2. Connect the tablet and the expert's PC to the access point set up. Information on this can be found in the Section [5.2](#).
3. Start the browser on the PC and call the IPv4 address of the SIPIX tablet using the following pattern: <https://xxx.xxx.xxx.xxx:5001>. The connection between the devices is established.



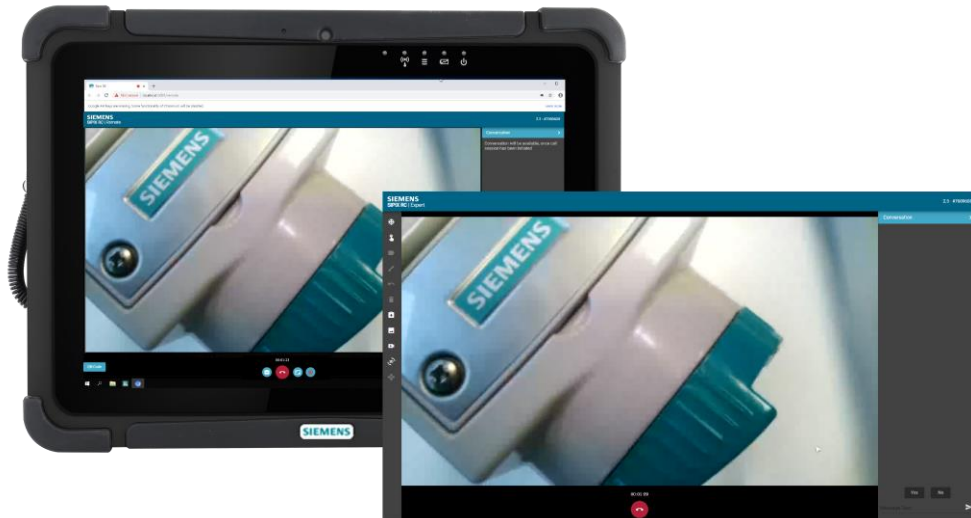
For more information on how to operate the expert view, please refer to Section ["6.5.2"](#).

6.2.1.5 Starting an Audio/Video Conference from your Tablet

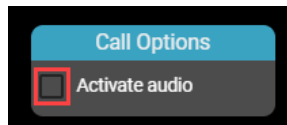
1. Start the "SIPIX RC" application on the tablet.
2. Click the Start Call button on the tablet to start a video session.



A requirement for conducting the video session is that an expert has set up a connection to the tablet. Accepting the call starts a video conference.



To turn on audio, enable the corresponding checkbox on the tablet:



Note For information on extending communication with data glasses, see Section ["6.4"](#).

For more information on operating the remote view, see Section [6.5.3](#).

6.2.1.6 Desktop Sharing

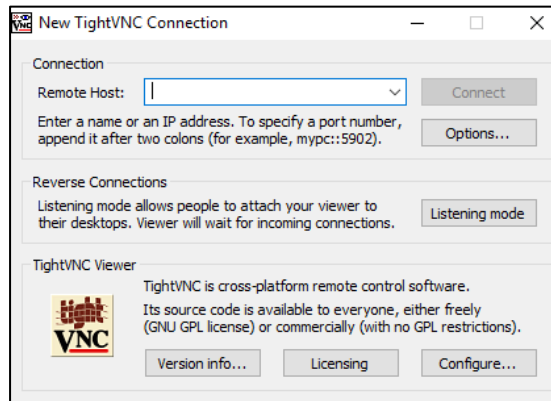
Desktop Sharing allows the remote expert full access to the SIPIX Tablet. In addition, data can be transferred to and from the SIPIX Tablet.

Requirement

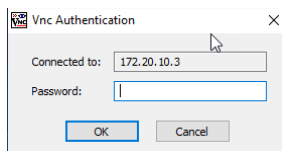
- To access the tablet via desktop sharing, you need the TightVNC software (<https://www.tightvnc.com/>). This software must be installed on the expert PC.

Procedure

1. Start the TightVNC software on the expert PC.



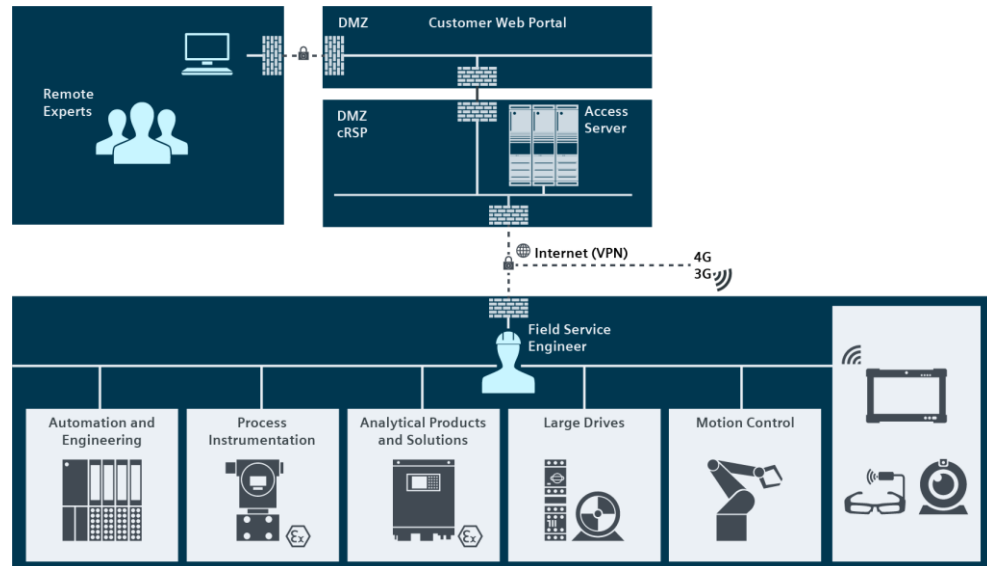
2. Enter the IPv4 address of the tablet in the Remote Host field.
3. Enter the default password "Admin" and click the "OK" button.



A dialog box with an access request is displayed on the tablet. Confirm this with the "Accept" button. After confirming the access request, the tablet can be operated by the remote expert via desktop sharing.

6.2.2 Communication with an Internet Connection via cRSP Customer Web Portal (Internet Only with SIPIX SD ZN)

The Customer Web Portal (CWP) enables secure remote access to the connected systems as well as data transmission to various devices and systems. The login to the CWP portal is done via a 2-factor authentication with a password and a PIN procedure via SMS or Email



6.2.2.1 CWP System Requirements

The current system requirements can be found on the registration page of the CWP under <https://crsp-fth.siemens.com/cwp-i>.

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6.2.2.2 Overview of steps

Communication via the CWP takes place in the following steps:

	Expert (CWP)	Field Service Engineer (Tablet)
1	Request access data for the CWP from Technical Support via Support Request .	-
2	Log into CWP	Prepare SIPIX SD ZN: <ul style="list-style-type: none"> - Start the SIPIX SD ZN - Establish a wireless connection - Start video/audio conference via SIPIX RC
3	Establish a remote connection to the tablet	Start audio/video conference
	Start desktop sharing	Accept desktop sharing

6.2.2.3 Requesting Access Data for the CWP

For the remote connection via the CWP, you need access data that you can request from Siemens Technical Support. Proceed as follows:

1. Contact Siemens Technical Support and create a support request via the web page <https://siemens.com/supportrequest/>.
2. Enter "SIPIX" in the search field and select your device from the list of suggestions. Click on the "Next" button.

The screenshot shows the 'Create New Support Request' process on the Siemens Industry Online Support website. The 'Product search' step is active, showing a search for 'SIPIX'. A list of products is displayed, with 'SIPIX MO ZN (BASIC)' selected. The 'Next' button is visible at the bottom right.

3. Enter the keyword "CWP" in the "Topic" field. Enter the following information in the "Details of the request" field:
 - Serial number of the SIPIX Service Tool (see reverse side)
 - Contact details for the user account in CWP (last name, first name; email address; mobile phone number)

Then click on the "Next" button.
4. In the last step, enter how you would like to be contacted and verify your information.

5. Click the "Send" button to request the access data for the CWP.

Your data will be checked by Siemens Technical Support and you will receive the access data via email.

6.2.2.4 Prepare SIPIX SD ZN

1. Start the tablet.
2. Connect to the internet. Information on this can be found in Section 5.
3. Double-click the "SIPIX RC" icon on the tablet's home screen to launch the application.

The web page "SIPIX RC Remote" will be opened automatically in the "Chromium" browser. Since the application is started in the background, it may take several minutes before the browser is launched.

6.2.2.5 Log on to CWP (Expert)

After you receive the credentials for the CWP, you can log into the CWP as an Expert and establish a remote connection to the tablet.

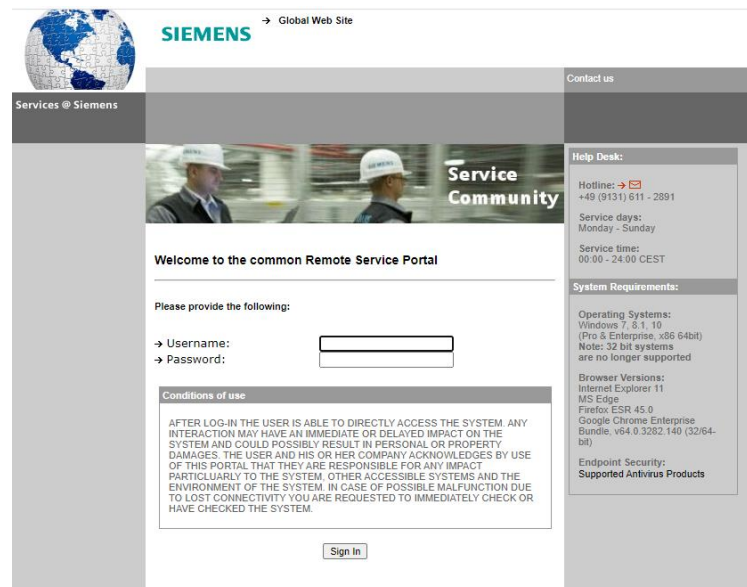
Requirements

- The tablet is started
- The tablet is connected to the internet
- The "SIPIX RC" application is open

Procedure

1. Open a browser and enter the following address:
<https://crsp-fth.siemens.com/cwp-i>

The CWP login page is loaded.



SIEMENS → Global Web Site

Services @ Siemens

Service Community

Welcome to the common Remote Service Portal

Please provide the following:

→ Username:

→ Password:

Sign In

Help Desk:

Hotline: → +49 (9131) 611 - 2891

Service days: Monday - Sunday

Service time: 00:00 - 24:00 CEST

System Requirements:

Operating Systems:
Windows 7, 8.1, 10
(Pro & Enterprise, x86 64bit)
Note: 32 bit systems are no longer supported

Browser Versions:
Internet Explorer 11
MS Edge
Firefox ESR 45.0
Google Chrome Enterprise
Bundle, v64.0.3282.140 (32/64-bit)

Endpoint Security:
Supported Antivirus Products

2. Enter your access data and click the "Sign In" button.
After login, a PIN authentication window is displayed. You will receive the mobile PIN within 2 minutes on your mobile phone by SMS or by email.

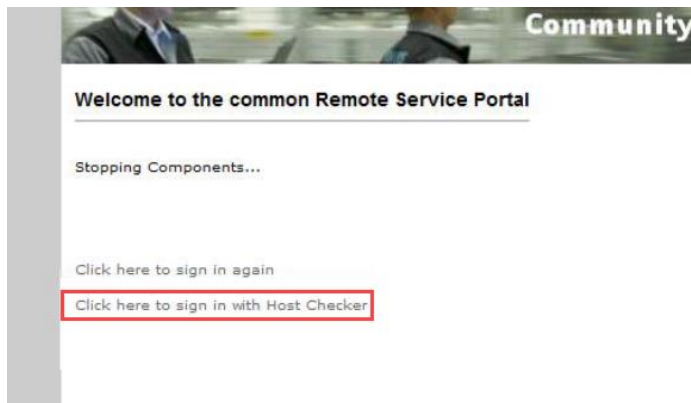
PIN Authentication

A PIN (one time password) has been sent to your mobile phone or to your email address. The PIN is usually delivered within seconds on your registered mobile phone or email address. Please start the authentication immediately or request a new PIN in case the authentication was not completed within 2 minutes.

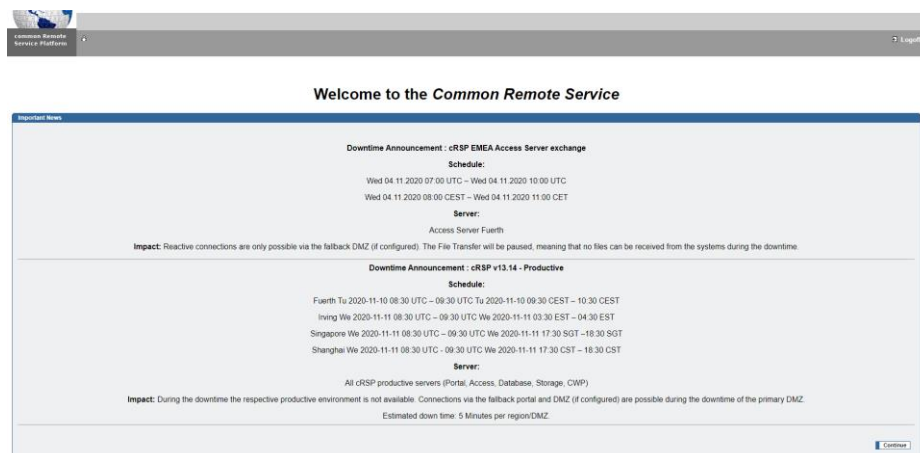
Your PIN:

3. Enter the mobile PIN and click the "Sign In" button.

In some cases, it is necessary to check the system requirements by using the application "Host Checker (Juniper)". In this case, click the appropriate link and follow the instructions to run the "Host Checker" application.



After a successful check of the system requirements you will be redirected to the Start Page of the CWP:



4. Click the "Continue" button.
In the "Customer Systems" area, the SIPIX Tablets for which you are activated are listed.

The screenshot shows the 'Customer Systems' page of the Siemens Common Remote Service Platform. The page header includes the Siemens logo, a 'Global Web Site' link, and navigation links for 'Home', 'Help', and 'Logoff'. The main content area displays a welcome message and user account information, including the last login time (12/09/2020 14:56:44) and a message stating 'You have access grants for 2 systems.' Below this, a table lists the customer systems.

Host Name	Customer Site	System Type	Product	IP Address (Site View)	Real Host IP Address	Operational State
SIEMENS_SIPIX_SD	SIEMENS_SIPIX_ServiceTablet			14.252.161		Complete
SIEMENS_SIPIX_SD	SIEMENS_SIPIX_ServiceTablet			14.252.162		Complete

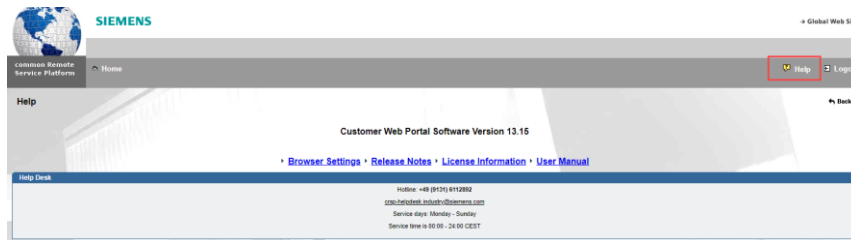
5. Click the tablet to which you want to connect. The corresponding detail view opens.

The screenshot shows the 'System - Detail' page of the Siemens Common Remote Service Platform. The page header includes the Siemens logo, a 'Global Web Site' link, and navigation links for 'Home', 'Help', and 'Logoff'. The main content area displays system details for 'SIEMENS_SIPIX'. The 'System Data' section shows the system name, site name, system IP, and operational state. Below this, there are tabs for 'Connect', 'Active Connections', 'System Details', 'Communication Interface', and 'Connection Logs'. The 'Connect' tab is active, showing a 'Connect Properties' section with fields for 'Service Call Identifier', 'Note', 'Login Procedure', and 'With Debugging'. Below this, there is a table listing applications.

Application Type	Client	Connect
WinVnc	UltraVNC	Desktop Sharing (VNC)
ping	--	ping
Extended Web	--	SIPIX RC - via Chrome

Additional browser settings for using the CWP

The CWP help page provides up-to-date information on the browser settings required for the CWP to run smoothly.



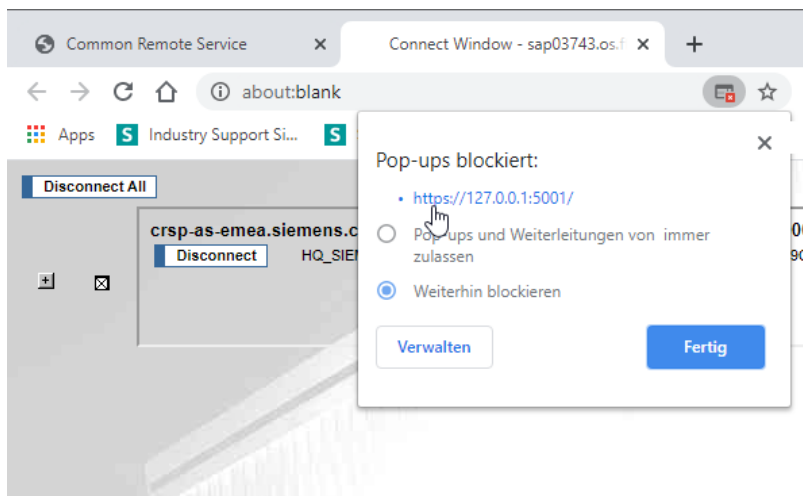
6.2.2.6 Establishing a Remote Connection to SIPIX MO/SD ZN via CWP

1. Click the link "SIPIX RC – via Chrome" in the "Applications" section of the CWP.

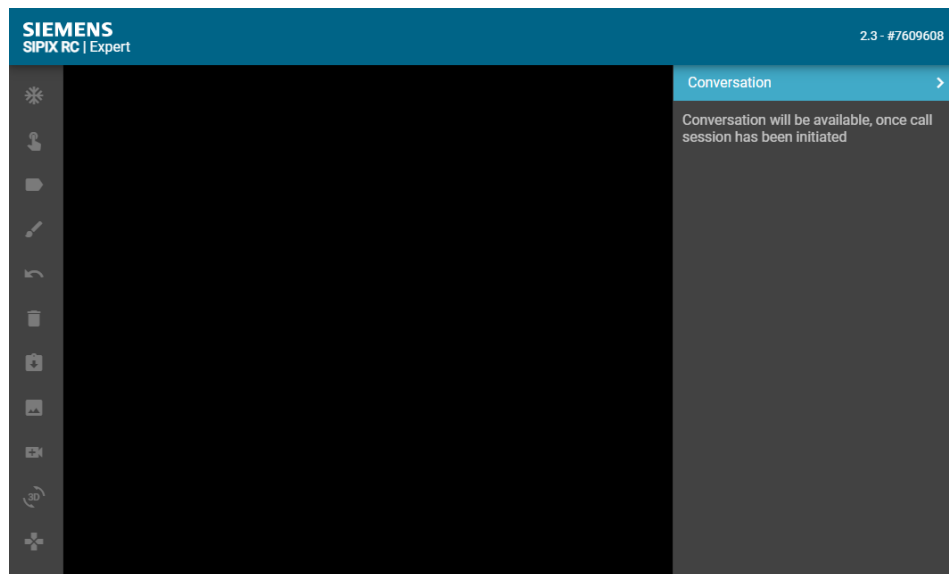
Applications - 3 items		
Application Type	Client	
WinVnc	UltraVNC	Desktop Sharing (VNC)
ping	--	ping
Extended Web	--	SIPIX RC - via Chrome

A window with the connection details opens.

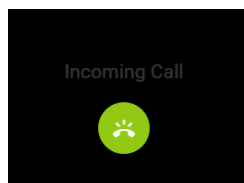
2. Click the pop-ups icon in the address bar of the window.



The SIPIX RC Expert application is started.



As soon as a video session is started from the tablet, an incoming call is displayed.



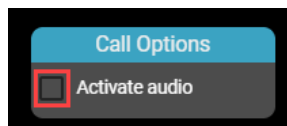
When the call is answered, an audio/video conference is started.

6.2.2.7 Starting an Audio/Video Conference from your Tablet

1. Activate the "SIPIX RC" application on the tablet.
2. Click the Start Call button on the tablet to start a video session.



The requirement for conducting the video session is that an expert has set up the connection to the tablet via the CWP. Accepting the call starts a video conference. To turn on audio transmission, enable the corresponding checkbox on the tablet:



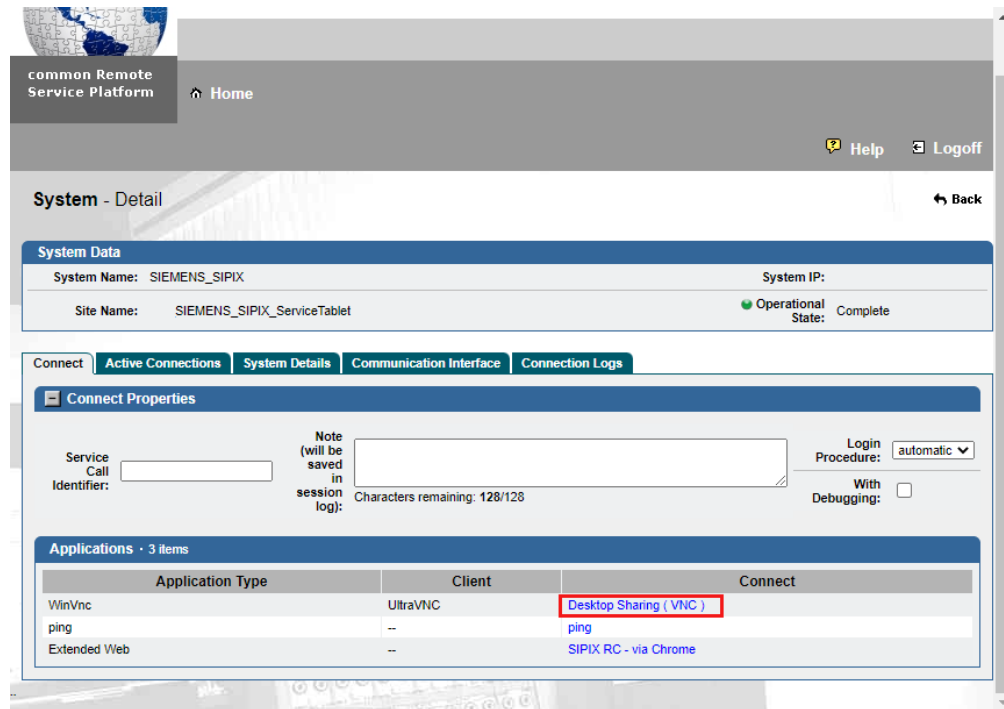
Further information on operation

For more information on operating the remote view, refer to the Section "[6.5.3](#)".

For more information on operating the glasses view, refer to the Section "[0](#)".

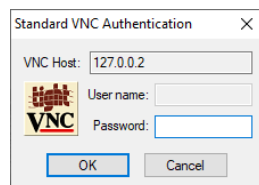
6.2.2.8 Desktop Sharing

1. Open the detailed view of the tablet in the CWP and click the link "Desktop Sharing (VNC)" in the "Applications" area.



A window with the connection details opens and the TightVNC software is started.

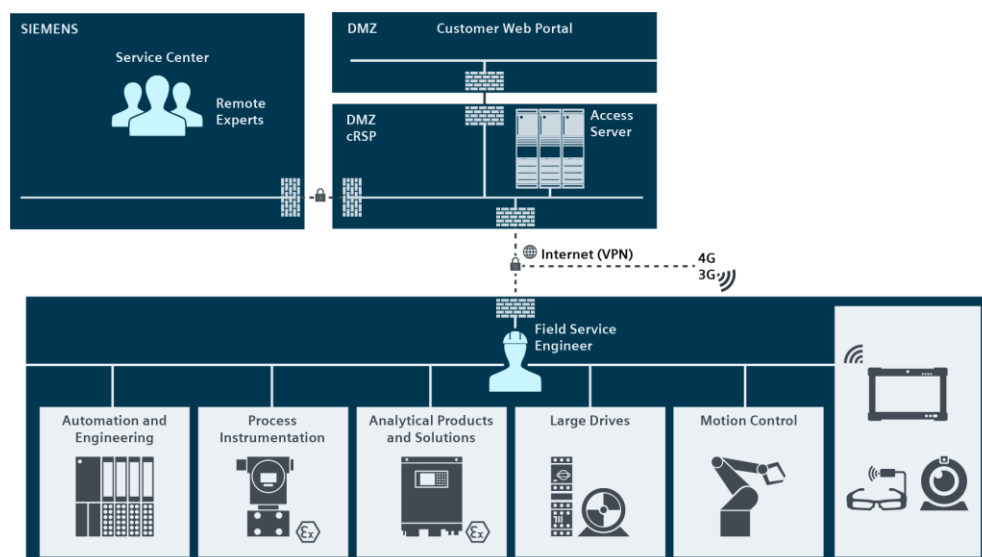
2. Enter the default password "Admin" and click the "OK" button.



A dialog box with an access request is displayed on the tablet. The service technician must confirm this request with the "Accept" button. After confirming the access request, the tablet can be operated by the remote expert via desktop sharing.

6.3 Communication with the Siemens Service Center (SIPIX SD ZN)

The SIPIX SD ZN offers the optimal possibility to connect to different Siemens experts worldwide via remote access. By default, experts for field devices or SIMATIC components can be integrated via SIPIX SD to assist in service operation. However, Siemens experts from other areas can also be requested for Remote Service after consultation via the cRSP infrastructure and the SIPIX SD.



6.3.1 Service Agreements and Remote Service Tickets

To use a Remote Service, you must first have a valid remote Service Agreement and a Remote Service Ticket are available. These can be obtained from the [Siemens Industry Mall](#) via the following order numbers:

- SIPIX Service Packages
 - Service Level Starter SD – 2 years BASIC – 9LA1110-1PA20-0AA0
- Remote Services for field devices
 - 9LA1110-1PB00-0AA0 (1 Remote Service Ticket)
 - 9LA1110-1PC00-0AA0 (5 Remote Service Tickets)
- Remote Services for SIMATIC
 - 9LA1 110-1AA00 (5 Remote Service tickets)

Note

The validity of the Remote Service tickets is one year.

6.3.2 Overview of steps

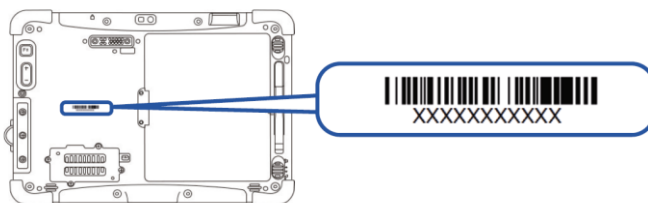
Communication via the CWP takes place in the following steps:

	Expert (Siemens)	- Field Service Engineer (Tablet)
1	-	- Order/arrange a Remote Service Agreement and a Remote Service Ticket.
2	-	- Remote Service Ticket via a Support Request and make an appointment (see Section 6.3.3).
3	Establish a remote connection to the tablet	Prepare SIPIX SD ZN: <ul style="list-style-type: none"> - Start the SIPIX SD ZN - Establish a wireless connection - Start video/audio conference via SIPIX RC
4		Start audio/video conference
	Start desktop sharing	Accept desktop sharing

6.3.3 Arranging a Service Call with Siemens Remote Services

In order to communicate with a Siemens expert during a service call, you must make an appointment with Siemens Remote Services. You have the following options for this:

- By phone at +49 (0)911 895 7 222. Tell the service representative the serial number on the back of the SIPIX Service Tool:



- Online via Support Request

Create Support Request

1. Contact Siemens Technical Support and create a support request via the web page <https://siemens.com/supportrequest/>.
2. Enter "SIPIX" in the search field and select your device from the list of suggestions. Click on the "Next" button.

3. Enter the keyword "Remote Service" in the "Topic" field. Enter the following information in the "Details of the request" field:
 - SIPIX serial number (on the back)
 - Contact details (last name, first name; email address; mobile phone number)
 - Desired date (date, time)
 - Details of the service item (e.g., level/flow meter, Simatic ET200 module, etc.)

Then click on the "Next" button.

4. In the last step, enter how you would like to be contacted and verify your information.
5. Click the "Send" button.

Your request will be checked by Siemens Technical Support and you will receive the access data via email.

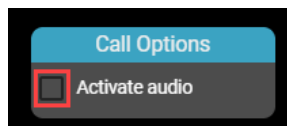
6.3.4 Conducting an Audio/Video Conference

1. Start the tablet and connect to the internet.
2. Activate the "SIPIX RC" application on the tablet.
3. Click the Start Call button on the tablet to start a video session.



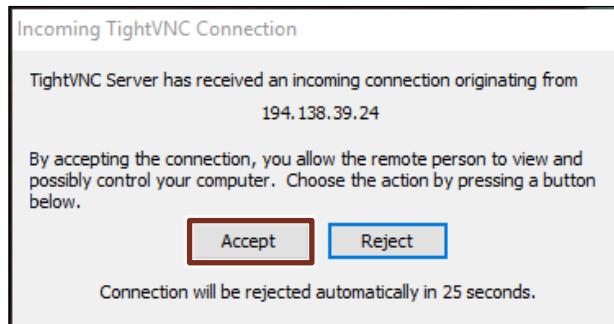
A requirement for the video session is that an appointment has been made with Siemens Remote Services or the call has been registered. Accepting the call starts a video conference.

To turn on audio transmission, enable the corresponding checkbox on the tablet:



6.3.5 Communication via desktop sharing

1. Start the tablet and connect to the internet.
2. Activate the "SIPIX RC" application on the tablet.
3. Wait for the desktop sharing access request from the Siemens remote expert.
4. If the access request has been started by the remote expert, the "Incoming TightVNC Connection" dialog appears. Confirm the access request by clicking the "Accept" button.



Only after confirming the access request on the tablet can it be operated by the remote expert via desktop sharing.

6.4 Expansion of communication through data glasses with Android operating system

The SIPIX MO/SD ZN tablet serves as an interface between the data glasses and the expert PC.

6.4.1 Preparations

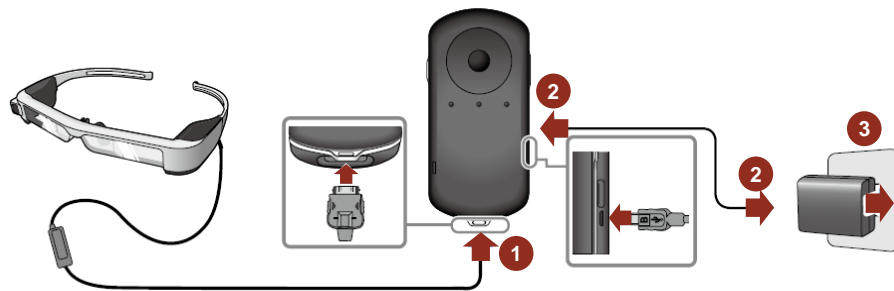
Commissioning of the data glasses

1. Connect the glasses by cable to the controller and to the AC adapter.
2. Charge the device.

Note

Observe the manufacturer's safety instructions.

Detailed information on commissioning and operation can be found in the manufacturer's documentation at: <https://www.epson.de/products/see-through-mobile-viewer/moverio-bt-300>



3. Press the Power button at the top of the controller to start the device.

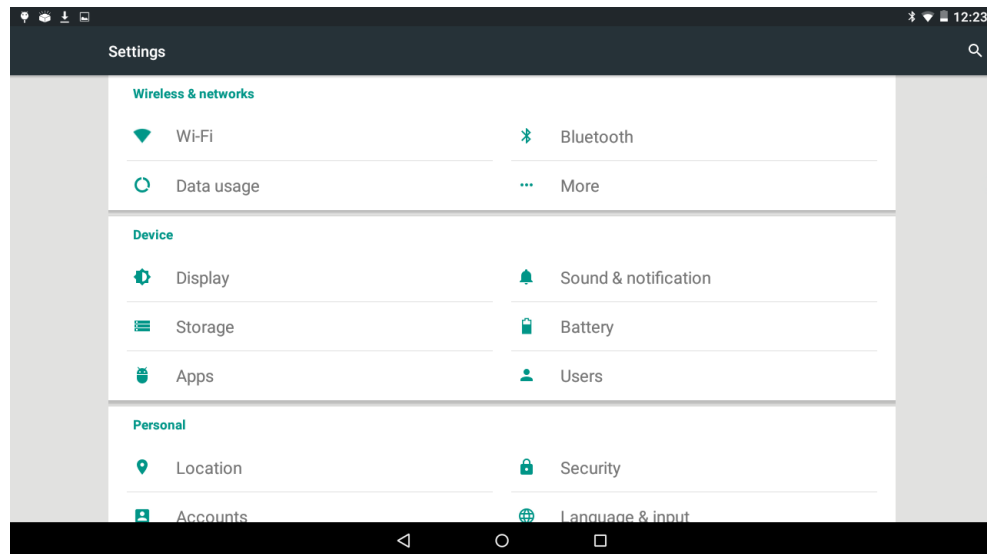
6.4.2 Setting up a Network Connection

After the goggles have started, you can establish a network connection. To connect to the SIPIX MO/SD ZN, ensure that both devices (EPSON Movero and SIPIX MO/SD ZN) are on the same network. A mobile hotspot, for example, is suitable for this purpose.

1. Access the app list.
2. Select the "Settings" app from the APP list.



3. Select "Wi-Fi" in the "Wireless & networks" section.



4. Enable the function and select the SSID of the router or mobile hotspot you are using.

6.4.3 Setting up a connection using data goggles

Requirement

- The SIPIX MO/SD ZN tablet is registered in the cRSP and approved for remote support use.
- The SIPIX MO/SD ZN tablet and the data goggles are on the same network with the same network ID.

Procedure

1. Start "SIPIX RC" on the SIPIX Tablet.



2. Start the data goggles via the power button
3. Open the browser via the application view on the data goggles.
4. Call the IPv4 address of the SIPIX tablet (<https://xxx.xxx.xxx.xxx:5001/bt>).
5. Allow access to the camera and microphone.



The data goggles are connected to the SIPIX MO/SD ZN.

For more information on operating the BT view, see Section [6.5.4](#).

Note

During use, activate the key lock on the data goggles.
Press and hold the left button of the tracking pad.

6.5 Operation of the SIPIX RC Video/Audio App

6.5.1 Overview of SIPIX RC Views

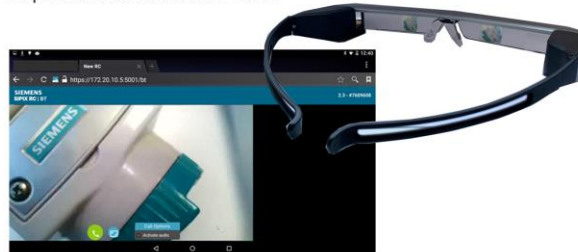
Expertensicht
<https://xxx.xxx.xxx.xx:5001>



Remote-Sicht
<https://xxx.xxx.xxx.xx:5001/remote>



BT-Sicht
<https://xxx.xxx.xxx.xx:5001/bt>



Three views are available for remote assisted work with the SIPIX RC:

- Remote view
The remote view is operated on the SIPIX tablet and can be accessed via the "SIPIX RC" application. At the same time, a decentralized web server is started when the SIPIX RC application is started. This web server can be reached by the "expert view" or the "BT view", both locally (in an Intranet) and via the secure communication platform cRSP (over the internet).
- Expert view
The expert view can be opened on a PC. You can do this in the following ways:
 - Calling the SIPIX IPv4 address in a web browser that supports WebRTC (e.g., MS Edge, Chrome, etc.) using the following pattern:
<https://xxx.xxx.xxx.xx:5001> (See Section [6.2.1](#))
 - Via the Customer Web Portal (see Section [6.2.2](#))

- BT view
To open the BT view, you have the following options:
 - When using data glasses or an end device with an Android operating system, the SIPIX IPv4 address can be entered in the browser using the following pattern: <https://xxx.xxx.xxx.xxx:5001/bt> (See also Section 6.4.3)
 - The BT view can also be opened and operated, for example, on a mobile phone or other devices with the Android operating system. To do this, type the SIPIX Ipv4 address into a browser using the following pattern: <https://xxx.xxx.xxx.xxx:5001/bt>.

Note

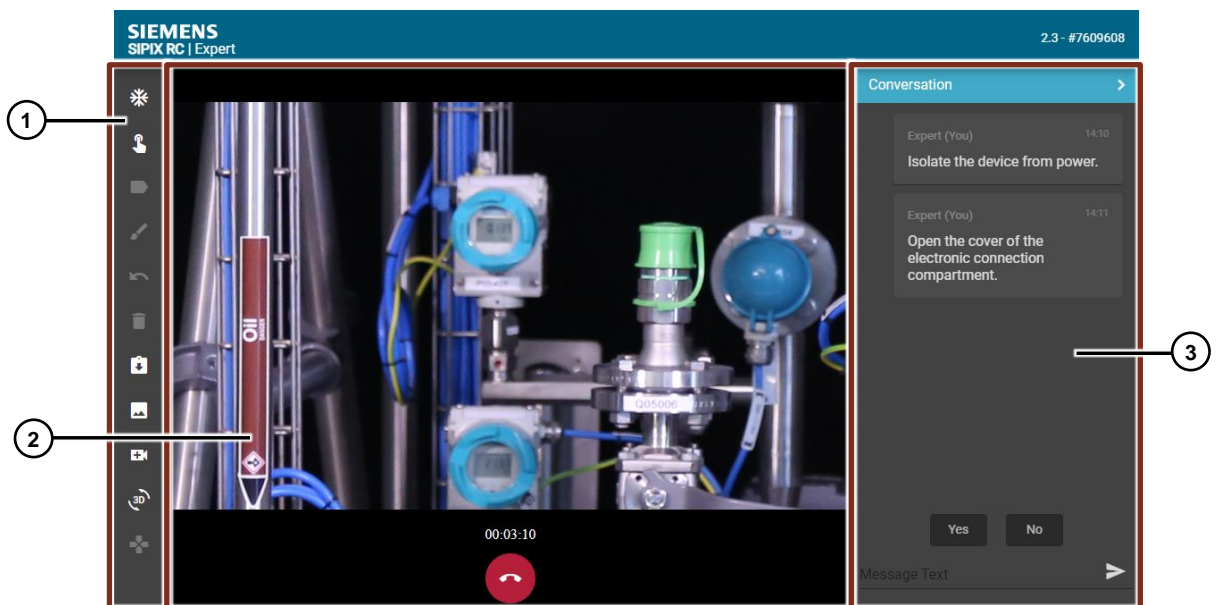
To establish a local (without internet) remote connection, all devices (expert PC, SIPIX Tablet, data glasses) must be in the same network.

6.5.2 Operating the Expert View

6.5.2.1 Overview












The expert view is divided into three main areas:

	Range	Description
1	Toolbar	In this section, you will find tools that you can use in conversation to clarify or explain facts.
2	Live stream	This area is where the video from the tablet is transmitted.
3	Live chat	This area offers you the possibility to communicate via short messages.



6.5.2.2 Toolbar

The following functions are available in the toolbar:

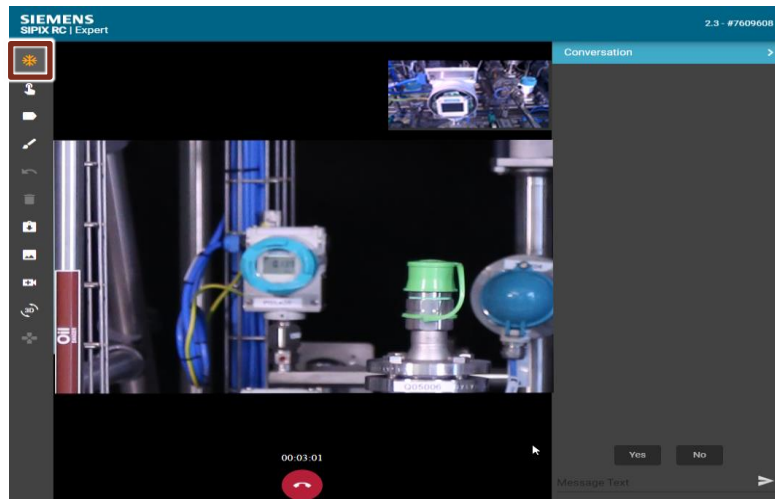
Tool	Name	Description
	Still image	This tool allows you to create a still image from the current display of the live stream (e.g., to add notes and markers or to point to specific details with the pointer).
	Pointer	You can use the pointer to point to details on a still image. This tool is only available in still mode
	Add note	This tool allows you to insert a label. This tool is only available in still mode.
	Draw	This tool allows you to draw using colored markers.
	Undo	This tool allows you to undo actions.
	Delete	You can use this tool to delete selected objects.
	Open object from clipboard	This tool allows you to open objects copied to the clipboard in the live stream area.
	Open image	This tool allows you to open images from a clipboard in the live stream area.
	Open a YouTube video	With this tool, you can call up a YouTube video
	Open 3D graphics	This tool allows you to open 3D graphics in STL format in the live stream area.
	3D controller	This tool allows you to move an open 3D graphic.

6.5.2.3 Generating a still image

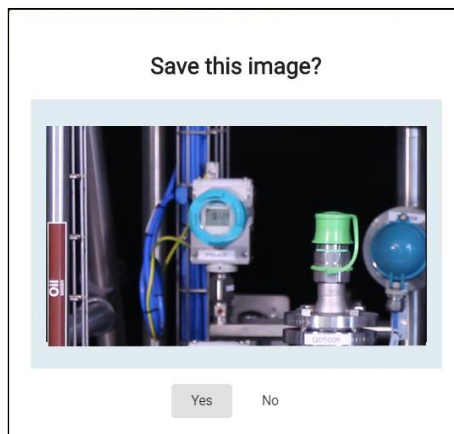
You have the option to pause the live stream at a certain point and create a freeze frame. Other tools let you highlight details, draw marks, and add notes in the still image. Then you can transfer the image to the SIPIX MO/SD ZN.

To create a still image, proceed as follows:

1. Click the Freeze button on the toolbar.
A still image is generated. The live stream will still be displayed in a window in the upper right corner of the live stream area.



2. To edit the image or to clarify details, you can now use the toolbar.
3. To transfer the image with its edits to the SIPIX tablet, click on the "Still image" icon in the toolbar.
The still image is transferred to the SIPIX tablet and the service technician receives a request to save it.



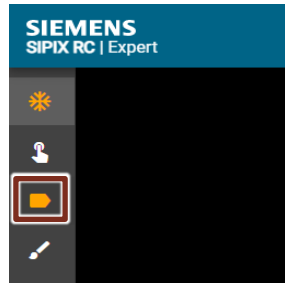
The live stream continues in expert view.

6.5.2.4 Add note

To use this function, you must first create a still image.

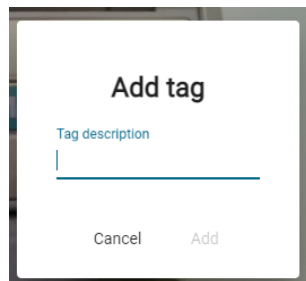
To add a note to a still image, follow the steps below:

1. Click on the "Add note" button.



The "Add tag" window is displayed.

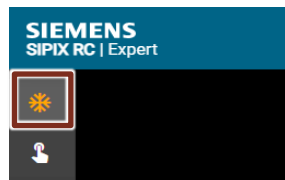
2. Enter the desired text and click the "Add" button.



A text field is created.



3. To transfer the still image to the SIPIX tablet and continue the live stream, click the "Still image" icon in the toolbar.



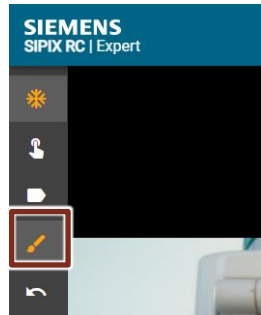
The still image is transferred to the SIPIX tablet and the service technician receives a request to save it.

6.5.2.5 Draw

To use this function, you must first create a still image.

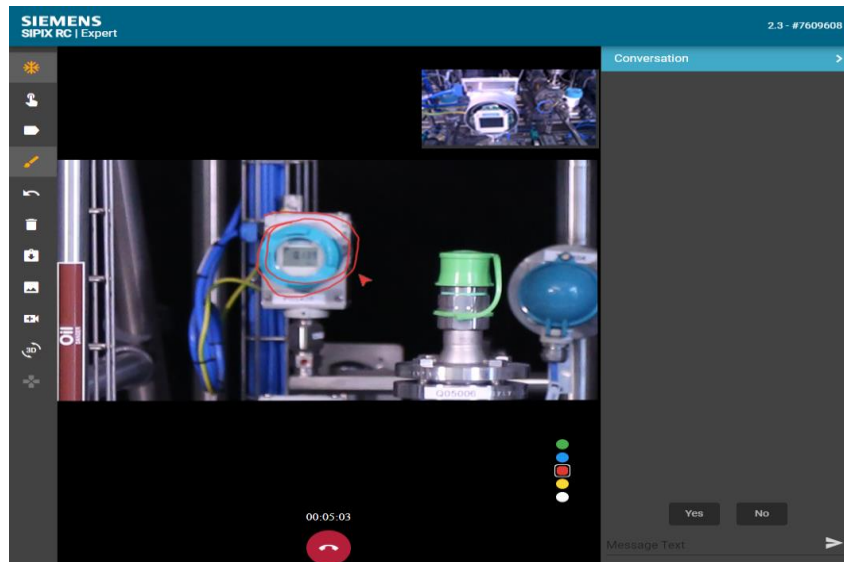
To draw marks in a still image freehand, follow the steps below.

1. Click the "Draw" icon.

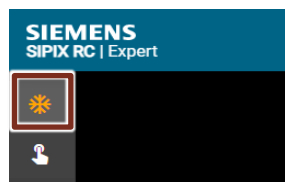


A color selection is displayed in the live stream area.

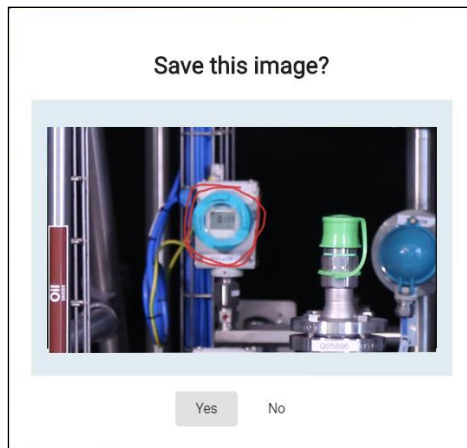
2. Select the desired color. Hold down the left mouse button and move the mouse to create the desired drawing.



3. To transfer the still image to the SIPIX tablet and continue the live stream, click the "Still image" icon in the toolbar.



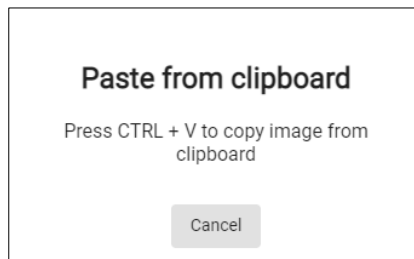
The still image is transferred to the SIPIX tablet and the service technician receives a request to save it.



6.5.2.6 Opening an Image from the Clipboard

To open an object from the clipboard in the live stream area, proceed as follows:

1. Click the "Paste from Clipboard" button on the toolbar.
A message is displayed.



2. Press the CTRL and V keys to insert an object.
3. To transfer the inserted object to the SIPIX tablet and continue the live stream, click the "Freeze" icon in the toolbar.



The object is transferred to the SIPIX tablet and the service technician receives a request to save it.

6.5.2.7 Open image

To display an image in the live stream area, follow these steps:

1. Click the "Open image" button on the toolbar.
The Explorer opens.
2. Select the desired image and click the "OK" button.
The image is displayed in the live stream area.
3. To transfer the inserted object to the SIPIX tablet and continue the live stream, click on the "Still Image" icon in the toolbar.

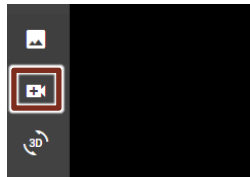


The object is transferred to the SIPIX tablet and the service technician receives a request to save it.

6.5.2.8 Open a YouTube video

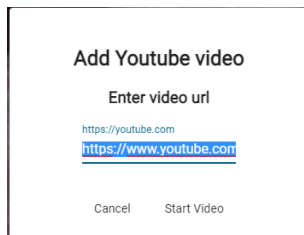
To open a YouTube video, follow these steps:

1. Click the "Open YouTube Video" button on the toolbar.

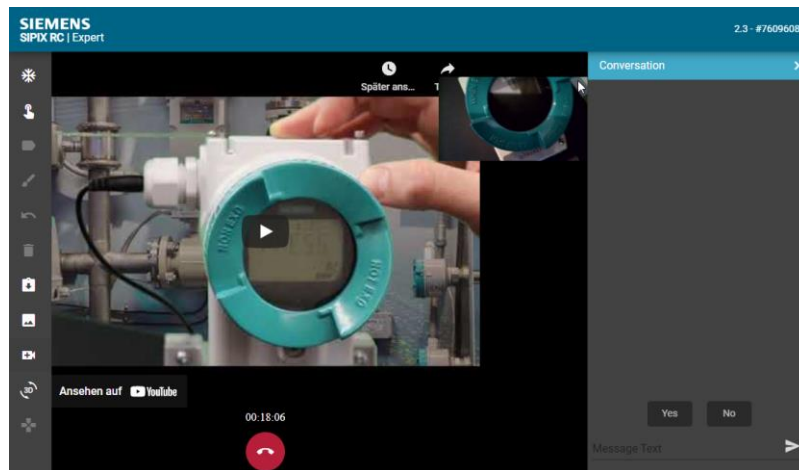


A window for entering the internet address opens.

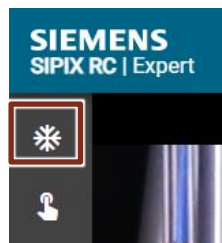
2. Enter the internet address of the video and click "Start Video".



The video will open in the live stream area.



3. To resume the live stream, click the Freeze icon in the toolbar.



6.5.2.9 Opening a 3D Drawing

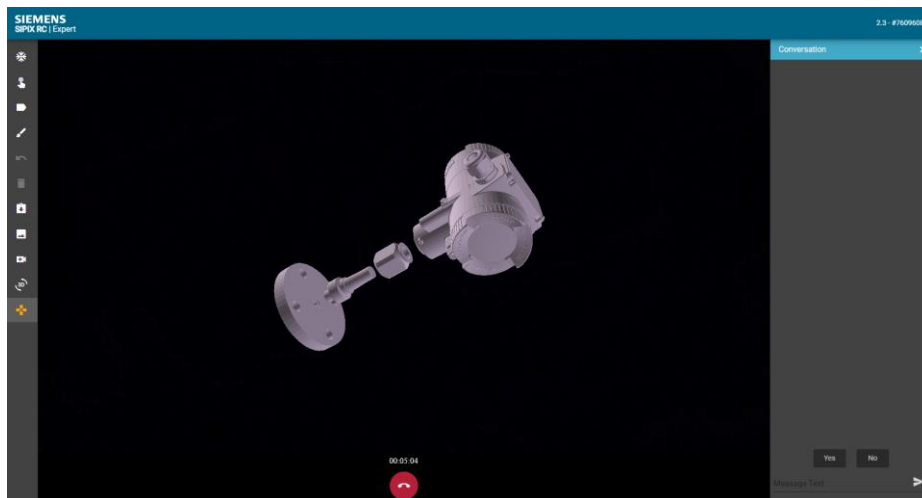
To open a 3D drawing, proceed as follows:

1. Click the "Open 3D drawing" button on the toolbar.

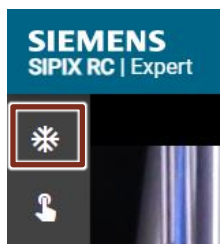


The Explorer opens.

2. Select the desired file in STL format and click the "OK" button.
The 3D drawing is displayed in the live stream area.



3. To transfer the inserted object to the SIPIX tablet and continue the live stream, click on the "Still Image" icon in the toolbar.



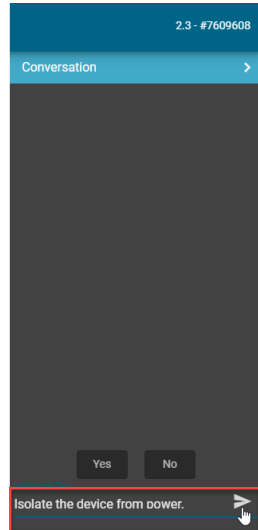
The object is transferred to the SIPIX tablet and the service technician receives a request to save it.

6.5.2.10 Using Live Chat

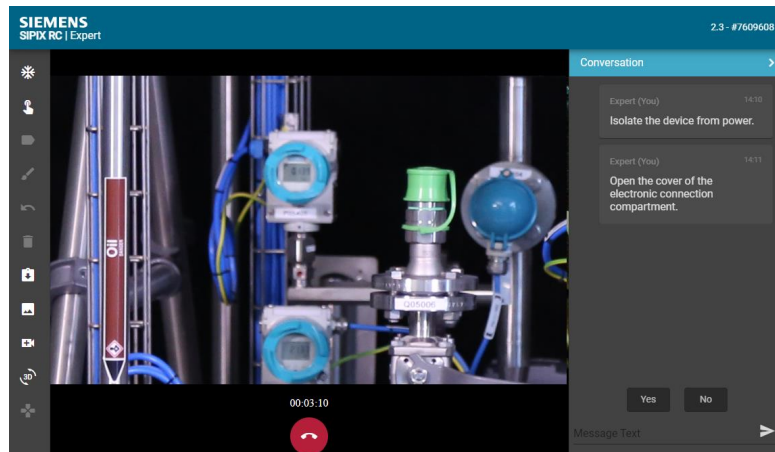
In the live chat, you can write messages or use the short answers "Yes/No".

To send a message via live chat, follow these steps:

1. Click in the text input field and enter your text message.
2. Click the button to send the message.



The message is sent to the SIPIX Tablet and appears in the live chat area.



6.5.3 Operating the Remote View

6.5.3.1 Overview







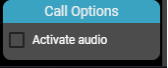

The remote view is divided into three main areas:

	Range	Description
1	Live stream	The camera recording is displayed in this area.
2	Toolbar	In this area, various call and video control functions are available.
3	Live chat	This area offers you the possibility to communicate via short messages.



6.5.3.2 Toolbar

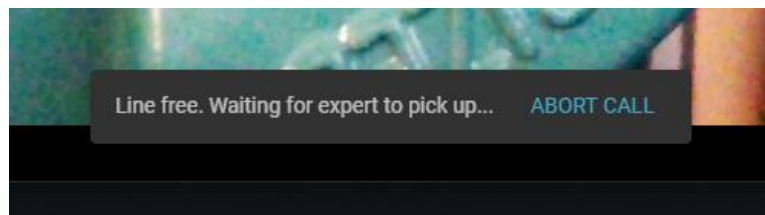
The following commands are available in the function bar:

Command	Name	Description
	Start call	Use this command to call a remote expert.
	End call	Use this command to end a running remote session
	Switch between front and rear camera	During a video conference you have the option to switch between the front and rear camera of the SIPIX tablet.
	Full-screen mode	This command allows you to control the window display.
	Transmitting a Remote Session	If another device with Android operating system (e.g., data glasses, mobile phone) is connected, you can transfer the remote session to it.
	Record video	With this command, you can start a video recording (max. 60 sec.). The recordings can be found under the following path: Windows (C:) > Users > Sipix > Pictures > SIPIX RC PICs
	Enable audio	With this checkbox, you can switch the audio transmission on and off.
	QR code	With this button, you can display the connection data of the SIPIX Tablet as a QR code.

6.5.3.3 Starting and Ending a Remote Session

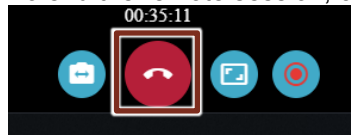
A requirement for conducting the remote session is that a remote expert is informed about the conference and is available for the call.

1. Click the "Start Call" button to start a video conference.



Accepting the call starts a video conference.

2. To end the remote session, click the "Call End" button.

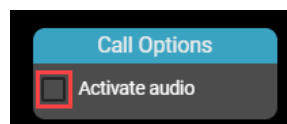


The remote session is terminated.

6.5.3.4 Turn on audio

By default, the microphone for audio transmission is disabled when starting a video conference.

To switch on audio transmission, enable the following checkbox:



6.5.3.5 Show QR code

To display the connection data of the SIPIX Tablet as a QR code, proceed as follows:

1. Click the "QR Code" button in the tablet's toolbar.



A window with the QR code is displayed



2. Open the selection list for the IP address of the tablet and select the desired connection type.
3. Launch the QR reader of the target device and scan the QR code.

Note

This feature is only available for devices with an Android operating system.

6.5.3.6 Transferring a Remote Session to Another Device

Requirement

Another device (e.g., data glasses) is connected to the SIPX Tablet (see Section [6.4.3](#)).

Procedure

To transfer a running remote session to another device running an Android operating system, follow these steps:

1. Click on the "Transfer Call" button.



The running remote session is transferred to the connected device.

6.5.3.7 Using Live Chat

In the live chat, you can write messages or use the short answers "Yes/No".

To send a message via live chat, follow these steps:

1. Click in the text input field and enter your text message.
2. Click the button to send the message.

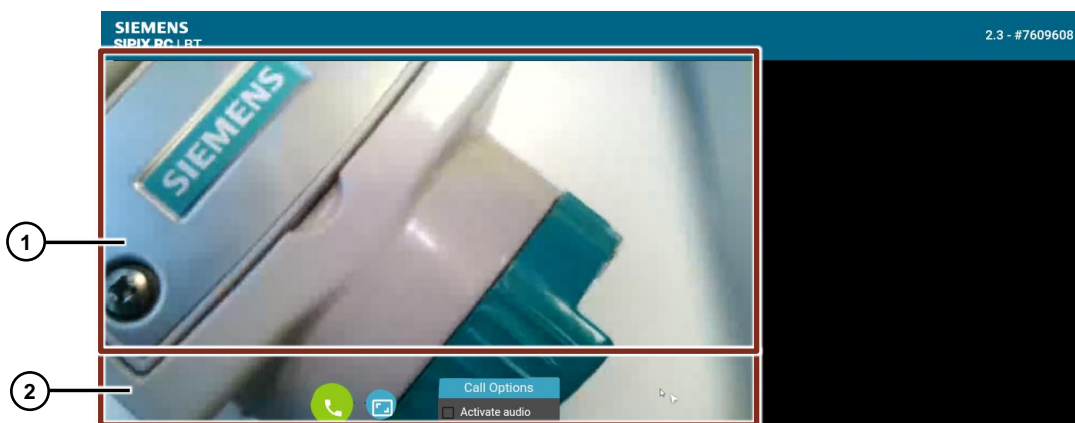
The message is sent and appears in the live chat area.

6.5.4 Operating the BT View

6.5.4.1 Overview





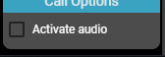
The BT view is divided into two main areas:

	Range	Description
1	Live stream	The camera recording is displayed in this area.
2	Toolbar	In this area, various call and video control functions are available.



Toolbar

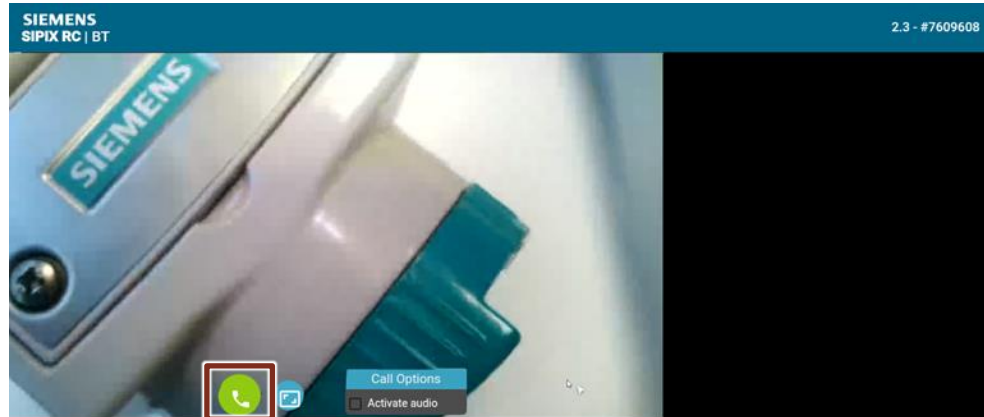
The following commands are available in the function bar:

Command	Name	Description
	Start call	Use this command to call a remote expert.
	End call	Use this command to end a running remote session
	Full-screen mode	This command allows you to control the window display.
	Transmitting a Remote Session	With this command you can transfer the remote session to the SIPIX Tablet.
	Enable audio	With this checkbox, you can switch the audio transmission on and off.

6.5.4.2 Starting and Ending a Remote Session

A requirement for conducting the remote session is that a remote expert is informed about the conference and is available for the call.

1. Click the "Start Call" button to start a video conference.



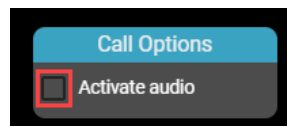
Accepting the call starts a video conference.

2. To end the remote session, click the "Call End" button.
The remote session is terminated.

6.5.4.3 Turn on audio

By default, the microphone for audio transmission is disabled when starting a video conference.

To switch on audio transmission, enable the following checkbox:



6.5.4.4 Transferring a Remote Session to SIPIX Tablet

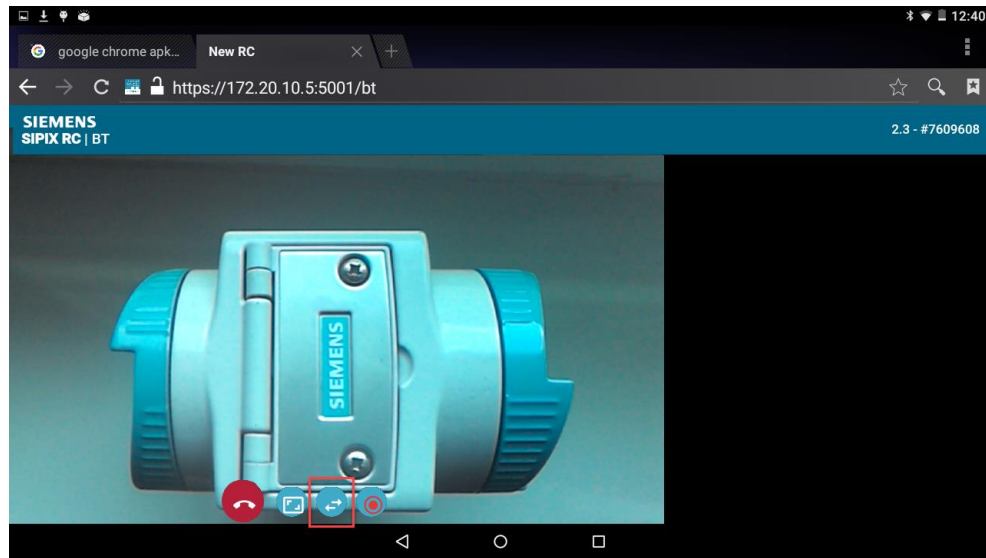
Requirement

The device (e.g., data glasses) is connected to the SIPX Tablet (see Section [6.4.3](#))

Procedure

To transfer a running remote session to the SIPIX Tablet, proceed as follows:

1. Click on the "Transfer Call" button.



The running remote session is transferred to the SIPIX Tablet.

7 Service and maintenance

For trouble-free operation, we recommend handling devices with care and to clean and treat them with care at regular intervals, depending on the use.

7.1 Maintenance

	Description
Display	<ul style="list-style-type: none">• Only use the supplied stylus for the touch screen.• Use the display protective film.• For cleaning, use a soft cloth and no aggressive cleaning agents.
Enclosure	<ul style="list-style-type: none">• Protect the device from impacts.• Do not expose the device to extreme strains (e.g., violent impacts and falls from great heights).
Environment	<ul style="list-style-type: none">• Do not expose the device to extreme temperatures.• Do not place the device in a dirty, damp or wet environment.
Battery	<ul style="list-style-type: none">• Discharge and charge the battery (every 2 months).• For long-term storage, remove the batteries from the Tablet PC and store them in a cool environment at approximately 0°C to +10°C and a charge level of approximately 40-50%.• It is recommended that the battery be recharged when it reaches approximately 5% charge. It is not necessary to completely discharge the battery. Also, the daily charging of the battery is not harmful. The batteries have no "memory effect".• If the battery is too quickly reduced from 100% charge to half charge, it is time to replace the battery. The expected battery life is approximately 300 charges for standard use.

7.2 Cleaning

CAUTION	Devices and accessories can be destroyed if handled improperly! <ul style="list-style-type: none"> • Generally disconnect the charging station from the power supply. • Only clean all interface contacts when the battery is removed. • No residues (e.g., lint) can be on the contacts. • No moisture residues should remain on the contacts. • When drying with compressed air, observe the safety precautions, both for your own protection and for the protection of the tablet.
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Observe the precautions to ensure your own safety and the operational safety of the device.

Suitable materials

- Alcohol cleaning wipes
- Lens cleaning wipes
- Cleaning swabs with cotton wool tip
- Isopropanol
- Compressed air hose spray

	Description
Enclosure	<ul style="list-style-type: none"> • With alcohol wipes.
Keys and spaces between keys	<ul style="list-style-type: none"> • With alcohol wipes.
Display	<ul style="list-style-type: none"> • With alcohol wipes. • Avoid accumulation of liquids and rub with an abrasion-free cloth.
Scanner window	<ul style="list-style-type: none"> • With cleaning product for optical devices.
Battery contacts	<ul style="list-style-type: none"> • To clean, remove the battery from the unit. • Soak the cleaning swabs with cotton wool tip in alcohol solution to remove all grease and dirt deposits on the contacts. • Repeat cleaning several times. • Before the battery is inserted, the contacts must be completely dry and no dust should be left behind.
Accessories such as charging station, docking station and cradle connectors	<ul style="list-style-type: none"> • To clean the contacts, disconnect the accessories from the power supply. • Soak the cleaning swabs with cotton wool tip in alcohol solution to remove all grease and dirt deposits on the contacts. • Repeat cleaning several times. • Before the accessory is reconnected to the power supply, the contacts must be completely dry and no dust must be left behind.

7.3 Maintenance intervals

The mechanical condition of the device should be checked regularly. The maintenance intervals depend on the environmental conditions. We recommend carrying out maintenance at least once a year. The maintenance intervals can be significantly extended with proper maintenance and consideration of the ambient conditions.

7.4 Storage

CAUTION	Damage to property due to improper storage! <ul style="list-style-type: none">• Pay attention to storage temperatures• Keep the Tablet PC away from moisture
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Additional information on the batteries

The batteries of the SIPIX SD are designed and manufactured to the highest industry standards. However, the operating time or storage time of a battery is limited. The actual battery life is affected by a number of factors, including heat, cold, harsh operating environments, and falling from great heights. If a battery is stored for more than 6 months, its performance may deteriorate permanently. Store batteries in a dry, cool place. To prevent self-draining, rusting of metal parts, and electrolyte leakage, remove the batteries from the unit for extended periods of storage.

Batteries stored for half a year or more should be charged and discharged at least every 3 months. If electrolyte has leaked, do not touch the affected areas and dispose of batteries properly. Replace the battery if its operating time has been significantly reduced.

The service life for all SIPIX SD batteries is six months, regardless of whether the battery was purchased separately or included with the tablet PC.

7.5 Battery

7.5.1 Battery Replacement During Operation

The tablet supports live battery replacement, which means it does not need to be turned off to replace the main battery. To enable this, there is an auxiliary battery in the tablet that is charged along with the main battery. This battery cannot be removed and must have sufficient power to replace the main battery during operation. If the auxiliary battery is fully charged, it can keep the tablet running for 5 minutes while the main battery is being replaced.

To replace the batteries during operation, proceed as follows:

1. Turn on the tablet, open the HotTab menu, and check the auxiliary battery charge.
2. If the auxiliary battery has a charge level of "Low", charge the tablet with the AC adapter until the auxiliary battery has a charge level of "Medium" or "High". Do not remove the main battery during this time.
3. As soon as the auxiliary battery has a "Medium" or "High" charge level, the main battery can be replaced.
4. Insert a charged battery into the battery compartment.
5. Check the main battery charge level in the HotTab menu. If it is not displayed correctly, check that the new battery is inserted correctly.
6. If the battery charge level is displayed correctly, the tablet can continue to operate normally.

**CAUTION**

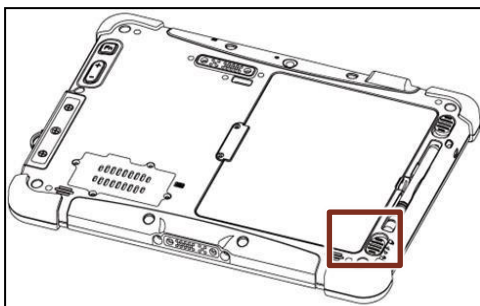
Charge the built-in auxiliary battery by connecting the tablet to the AC adapter every two months to keep it intact and avoid problems due to excessive battery drain.

7.5.2 Installing and Removing the Battery

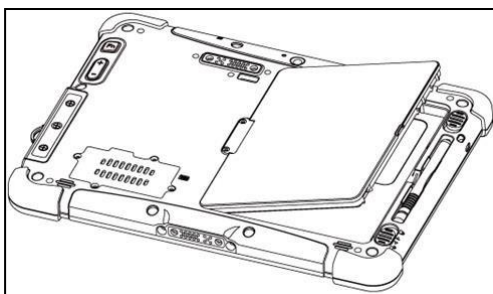
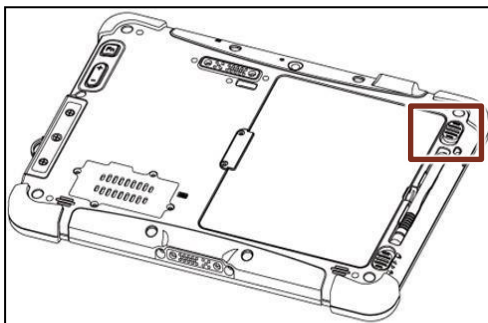
Insert Battery Pack

To insert the battery pack, proceed as follows:

1. Disconnect all cables from the tablet PC.
2. Turn the tablet over so that the back is facing up.
3. Locate the battery lock slide of the battery compartment and push it to the unlocked position.



4. Locate the battery release slide, which is spring loaded. Pull and hold it back.



5. Insert the battery with the terminal pins first, then push it into the battery compartment. Hold the battery release slide until the battery is fully inserted.
6. Before releasing the battery release slide, ensure the battery is fully inserted in the battery compartment. When fully inserted, the battery is flush with the case.

Remove the battery pack

Follow these steps to remove the battery pack:

1. Shut down the tablet (or put it to sleep). Disconnect all cables from the computer.
2. Turn the tablet PC over so that the back is facing up.
3. Locate the battery compartment battery release slide and push it to the unlocked position.
4. Locate the battery lock slider, which is spring loaded. Pull and hold it back.
5. Remove the battery through the opening on the side of the battery compartment.

8 Recycling and disposal

The devices described in this instruction manual can be recycled due to their low levels of pollutants. Contact a certified disposal service company for environmentally sound recycling and disposal of your old devices.

9 Error messages and solutions

9.1 Error Messages of the Application "SIPIX RC2"

Error message	Possible cause	Possible troubleshooting
Permission was denied! Recording screen	Screen recording not allowed	Check browser
Microphone is turned off!	No microphone connected	Connect the microphone
Socket Connection Error???	Error with the socket connection	Check network Restart the application
Connection to server failed! Retrying...	Socket connection error	Check network Restart the application
The input-text does not appear to be a valid YouTube link	Wrong YouTube link	Enter YouTube link again
Only JPG and PNG images are supported!	Wrong image format	Use JPG and PNG only
Invalid file type!	Wrong 3D file format	Use STL only
Data overlap! Another download was running..." "Download Failed"	A download is already running	Wait until the download is finished
Session already running	A browser session is already running	End existing session

9.2 Error Messages of the SIPIX Tablet

Errors	Possible troubleshooting
Die Battery is not being charged.	<ul style="list-style-type: none"> - Check that the AC adapter is properly connected and the battery is properly inserted.
No image appears on the screen.	<ul style="list-style-type: none"> - The tablet PC may be in sleep mode. Press the ON/OFF button to bring the tablet/display out of sleep mode. - The backlight setting may be too low. Increase the illumination setting.
The screen goes blank or the display disappears or becomes dim.	<ul style="list-style-type: none"> - Check the HotTab menu to see if the LED indicator has been disabled. - Check that the AC adapter is properly connected. - In battery mode, check if the battery is empty, recharge the battery if necessary.
The Wi-Fi signal is poor.	<ul style="list-style-type: none"> - The tablet PC may be too far away. Move the tablet closer to the access point or other associated wireless device. - Check for interfering signals in the area with good Wi-Fi signal, such as microwave ovens, wireless phones, etc. Move the tablet PC away from objects that can cause interference.

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Errors	Possible troubleshooting
No connection to another Wi-Fi device possible.	<ul style="list-style-type: none"> - Check whether the Wi-Fi function is switched on. - Check that the SSID setting for each wireless device on the network matches. - Restart the tablet PC. - Check if the setting of IPv4 address or subnet mask is OK.
Cannot connect to another device via Bluetooth.	<ul style="list-style-type: none"> - Check that Bluetooth is turned on for both devices (check that Bluetooth is enabled in the HotTab menu on the tablet PC). - Check that the units are no more than 10 m apart and that there are no walls or large obstacles between them. - Check that the devices are turned on and configured to be recognized. - Check whether the devices are compatible with each other.
The GPS application can't find my location.	<ul style="list-style-type: none"> - In the HotTab menu, check that the GPS function is turned on. - Check that the GPS receiver and location sensor are enabled in the control panel. - The tablet PC may be too far away. Move your tablet PC outdoors or closer to a window. - Check for interfering signals in the environment, such as microwave ovens, wireless phones, etc. Move the tablet PC away from objects that can cause interference.
No sound is produced.	<ul style="list-style-type: none"> - Adjust the volume of the tablet PC using the volume control. - If an external audio device is used, check that the cable is connected correctly.
The display on the tablet PC cannot be transferred to another monitor.	<ul style="list-style-type: none"> - Check if the VGA driver is installed. - Check that the selected output is set correctly.
Problem with GPS accuracy	<ul style="list-style-type: none"> - When using the GPS function, we recommend disabling the barcode scanner in the HotTab menu to reduce interfering signals.
The RFID scanner doesn't seem to be working.	<ul style="list-style-type: none"> - The RFID scanner is pre-assigned on COM port 3 in SIPIX via the operating system. Check in the Device Manager under Windows to confirm whether the RFID scanner is set to COM port 3.
Battery leaking or inflated	<ul style="list-style-type: none"> - The lithium battery in this tablet may swell after frequent charging/discharging, but this is not a safety issue. - If the device is operated in this state for a longer period of time, the battery may become jammed. It must not be used any further and should be replaced by a new battery. Observe the safety instructions for the battery pack in Section 3.7.

10 Technical Specifications

Product Specification

Display	Size	10.1" IPS display with LED backlight
	Resolution	1920 x 1200 WUXGA
	Brightness	800 nits With direct optical bonding for readability in sunlight
	Touchscreen	Multi-touch capacitive
	Contrast ratio	800:1
	Viewing angle	85/85/85/85
	Technology	<ul style="list-style-type: none"> - Glare-free - Automatic screen rotation
Technical system data	Processor	Intel® Pentium N4200 1.10 GHz, up to 2.50 GHz with Turbo Boost Technology
	System memory	4 GB LPDDR4 (up to 8 GB)
	Memory	128 GB SSD (options up to 512 GB), additional storage available with microSDXC card slot
	Graphic	Intel® HD Graphics 504
	Operating system	Windows 10 IoT Enterprise (64 bit)
Wireless communication	WLAN	802.11 a/b/g/n/ac
	Bluetooth	Bluetooth 5.0
	GNSS	GPS, GLONASS
	WWAN	Optional 4G/ LTE or 3G
Audio	Microphone	Integrated dual digital microphone with noise reduction
	Loudspeaker	2 x 1 Watt
Interfaces	Docking connector	1 x 19-pin docking connector
	HDMI	1 x Micro HDMI
	USB	1 x USB3.0 (Type A), 1 x USB3.0 (Type C)
		Note: The USB Type-C connector complies with the USB 3.0 standard, which does not support Alternate Mode (ALT) or USB Power Delivery (USB-PD).
	Setting the voltage input	1 x voltage connection
	MicroSD	1 x MicroSD card slot
	Audio	1 x audio combo plug (mic in or line out)
	Extension connection	1 x extension connector for USB 2.0/full RS232 (optional)
	Micro-SIM	1 x Micro SIM card slot
	mini PCIe	1 x Mini PCIe for WWAN module

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Input	Touchscreen	10-point multi-touch, supports rain, pen, glove operation mode
	Keys	QWERTY keyboard on screen <ul style="list-style-type: none"> - 1 x Power, 1 x Home, 2 x Volume - 2 x function keys (programmable function key configured via HotTab)
Status indicators	LED displays	Power supply, battery, HDD, RF
	Sensors	Brightness sensor, G-sensor, Gyroscope, E-Compass
Cameras	Front camera	2MP webcam
	Rear camera	8MP camera with autofocus and LED light
Data capture	Integrated	Optional 1D/2D barcode reader Optional HF RFID reader
	Additional module	Optional UHF RFID reader or smart card reader
Protection function	Protection	<ul style="list-style-type: none"> - Password protection for users and hard disk backup - Trusted Platform Module (TPM) 2.0 - Kensington lock
	Mobile Device Management	Compatible with SOTI MobiControl
Power management	Setting the voltage input	12-19V DC
	Battery	Standard: 7.4 V, typ. 5140 mAh Li-polymer battery (2S1P) High availability: 7.4 V, typ. 10280 mAh Li-polymer battery (2S2P, optional)
	AC adapter	110-240 AC to 19V DC Adapter
	Battery operating time	Std. battery: 9 hours* High-capacity battery: 16 hours
	Adapter	100-240V, 50-60Hz / 19V DC
Mechanical and environmental conditions	Operating temp.	-20 °C ~ +60 °C (mains operation), -10 °C ~ +50 °C (battery operation)
	humidity	10 to 90% rel. LF, non-condensing
	IP protection	IP65, dust- and water-proof
	Shock	MIL-STD-810G Method 516.6 Procedure I
	Vibration	MIL-STD-810G Method 514.6 Procedure I
	Case	MIL-STD-810G Method 516.6, 4 ft, fall on concrete
	Dimensions	271.9 x 198.3 x 19.5 mm (10.7" x 7.76" x 0.77")
	Weight	1.2 kg with standard battery 1.4 kg with optional high-performance battery
Standards and Certification	EMC	CE, FCC

11 Appendix

11.1 Service and support

Industry Online Support

Do you have any questions or need assistance?

Siemens Industry Online Support offers round the clock access to our entire service and support know-how and portfolio.

The Industry Online Support is the central address for information about our products, solutions and services.

Product information, manuals, downloads, FAQs, application examples and videos – all information is accessible with just a few mouse clicks:

support.industry.siemens.com

Technical Support

The Technical Support of Siemens Industry provides you fast and competent support regarding all technical queries with numerous tailor-made offers – ranging from basic support to individual support contracts.

Please send queries to Technical Support via Web form:

support.industry.siemens.com/cs/my/src

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Service offer

Our range of services includes the following:

- Plant data services
- Spare parts services
- Repair services
- On-site and maintenance services
- Retrofitting and modernization services
- Service programs and contracts

You can find detailed information on our range of services in the service catalog web page:

support.industry.siemens.com/cs/sc

Industry Online Support app

You will receive optimum support wherever you are with the "Siemens Industry Online Support" app. The app is available for iOS and Android:

support.industry.siemens.com/cs/ww/en/sc/2067

11.2 Industry Mall



The Siemens Industry Mall is the platform on which the entire siemens Industry product portfolio is accessible. From the selection of products to the order and the delivery tracking, the Industry Mall enables the complete purchasing processing – directly and independently of time and location:

mall.industry.siemens.com