

EM45 RFID

Enterprise Mobile Series



ZEBRA

Quick Start Guide

2025/01/07

ZEBRA and the stylized Zebra head are trademarks of Zebra Technologies Corporation, registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners. ©2024 Zebra Technologies Corporation and/or its affiliates. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements.

For further information regarding legal and proprietary statements, please go to:

SOFTWARE: zebra.com/informationpolicy.

COPYRIGHTS: zebra.com/copyright.

PATENTS: ip.zebra.com.

WARRANTY: zebra.com/warranty.

END USER LICENSE AGREEMENT: zebra.com/eula.

Terms of Use

Proprietary Statement

This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries ("Zebra Technologies"). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.

Product Improvements

Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.

Liability Disclaimer

Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.

Limitation of Liability

In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Model Numbers

This guide applies to the following model numbers: EM45A2 (EM45 RFID North America) and EM45B2 (EM45 RFID Rest of the World).

Unpacking the Device

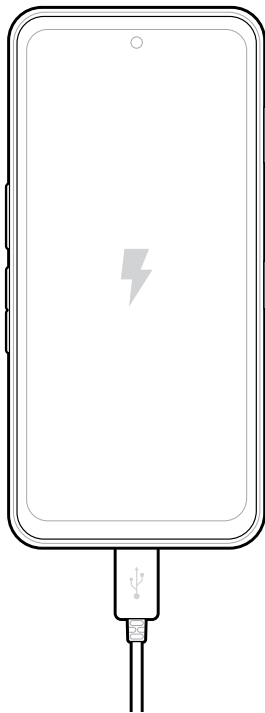
Unpack the device from the box.

1. Carefully remove all protective material from the device and save the container for later storage and shipping.
2. Verify the following are in the box:
 - EM45 RFID Enterprise Mobile
 - SuperSpeed (USB 3.0) USB-C type cable
 - Regulatory guide
3. Inspect the equipment for damage. If any equipment is missing or damaged, contact the Global Customer Support Center immediately.
4. Before using the device for the first time, remove the protective shipping film.

Charging the Device

Fully charge the device before turning it on.

1. Plug the Zebra 45W power adapter (sold separately) or compatible charger into a wall outlet.
2. Connect the USB-C cable to your device.



Features

Main features of EM45.



Number	Item	Description
1	Front camera	8 megapixels (MP).
2	Back camera	50 MP with Optical image stabilization (OIS).
3	Integrated RFID	Ultra-high frequency (UHF) RFID.
4	Programmable button (right)	By default, opens Zebra's Workcloud Communication Push-to-Talk (PTT) (if installed), or can be used for other apps, such as Microsoft Teams PTT.  NOTE: Both apps need to be installed separately.
5	Power button and biometric fingerprint sensor	Turns the display on/off. Also used as a fingerprint sensor for unlocking EM45. Go to Biometrics Security for more information.
6	Speaker	Audio output for video and music playback. Provides audio in speakerphone mode.

Number	Item	Description
7	USB-C port	Provides power and communications to the device.
8	Main microphone	Communications in handset/handsfree mode, audio recording, and noise cancellation.
9	Nano SIM/microSD slot	Holds a SIM and/or microSD card.
10	Microphone	Communications in handset/handsfree mode, audio recording, and noise cancellation.
11	Programmable button (top)	Opens the Camera app in unlocked mode and wakes up the device (default). Or it can be used to open other apps, such as a digital voice assistant or duress (emergency) apps that are installed separately
12	Volume buttons	Increase and decrease volume.
13	Programmable button (left)	Opens Camera barcode scanning for data capture (default).

Turning On/Off the Device

When turning on EM45 for the first time, it guides you to set up your Wi-Fi connection and device settings.

1. Press and hold the Power button (right side).
2. Follow the setup prompts (for example, language selection and network connection) displayed on the device.
3. Tap the **Settings**  app to customize your device.
4. To turn off the device, press and hold the Power button, and then tap **Power off**.

Protecting Your Device

Securing your device enhances privacy and safeguards personal information from unauthorized access.

Setting a Screen Lock

Protect your device with a screen lock.

1. Go to **Settings > Security > Screen lock**.
The **Choose a screen lock** screen displays.
2. Select the backup locking method you want to use for the lock screen.
 - **Swipe**
 - **Pattern**
 - **PIN**
 - **Password**
3. Follow the screen prompt on how to set a lock.

Biometrics Security

Use biometrics to securely unlock your device and log into accounts.

Adding a Fingerprint Lock

Protect your device with your fingerprint.

1. Go to **Settings > Security > Fingerprint**.

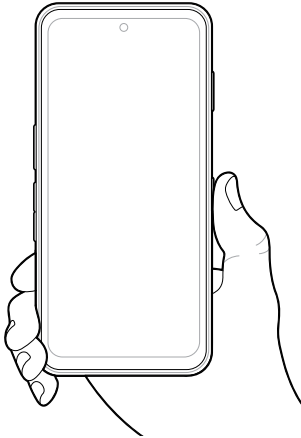
The **Choose a screen lock** screen displays.

2. Select the backup locking method you want to use for the lock screen.

- **Pattern**
- **PIN**
- **Password**

3. Follow the screen prompts to register your finger and activate the fingerprint lock.

When unlocking your device with your finger, place the registered finger on the Power button.



Setting Up Face Authentication

Protect your device with facial authentication.



IMPORTANT: Do not wear a face covering (for example, a mask or sunglasses) when setting up face authentication.

1. Go to **Settings > Security > Face Unlock**.

The **Choose a screen lock** screen displays.

2. Select the backup locking method you want to use for the lock screen.

- **Face Unlock + Pattern**
- **Face Unlock + PIN**
- **Face Unlock + Password**

3. Follow the screen prompts to authenticate your face.

When unlocking your device with your face, turn on the display and look at the front camera.

Installing the SIM Card

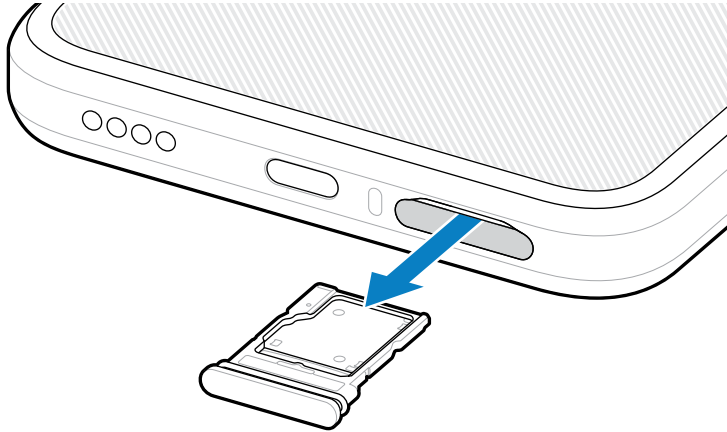
A SIM card or eSIM is required to make calls and transfer data over a cellular network.

The device also offers Dual SIM/Dual Standby (DSDS), which allows users to use an eSIM and SIM card and remain on standby at any time.

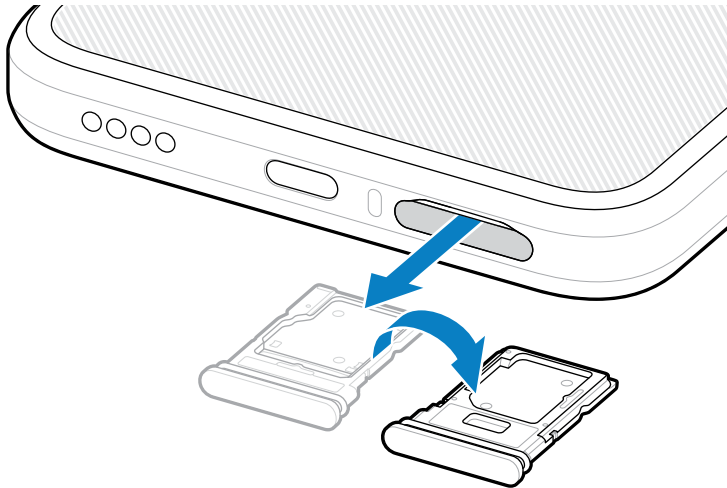


CAUTION: Follow proper electrostatic discharge (ESD) precautions to avoid damaging the SIM card. Proper ESD precautions include but are not limited to, working on an ESD mat and ensuring the operator is properly grounded.

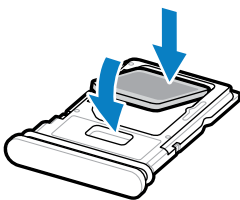
1. Pull the card holder out of the device.



2. Flip the card holder over.

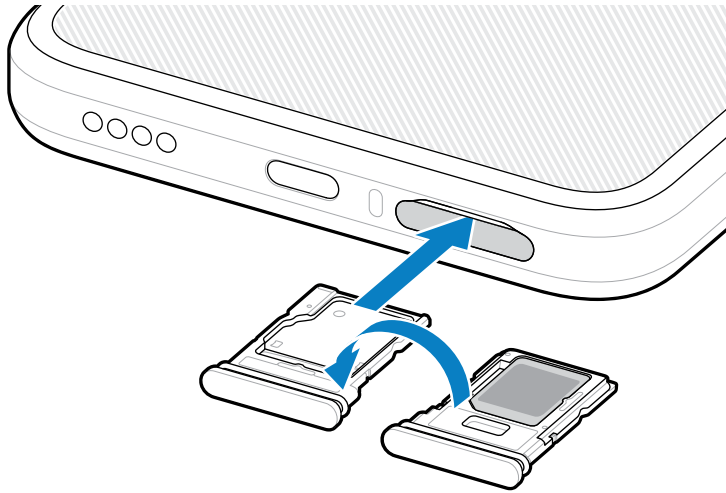


3. Place the SIM card end, with contacts facing up, into the card holder.



4. Press the SIM card down into the card holder and ensure that it seats properly.

5. Flip the cardholder over and re-install the card holder.



Activating an eSIM

Use an eSIM on EM45. Before using it, activate the eSIM.



NOTE: Before adding an eSIM, contact your carrier to obtain the eSIM service and its activation or QR code.

1. On the device, establish an internet connection via Wi-Fi or cellular data with an installed SIM card.
2. Go to **Settings > Network & internet**.
3. Tap + next to **SIMs** if a SIM card is already installed, or tap **SIMs** if there is no SIM card installed.

The **Mobile network** screen displays.

4. Select:
 - **MANUAL CODE ENTRY** to enter the activation code, or
 - **SCAN** to scan the QR code to download the eSIM profile.

The Confirmation dialog box displays.

5. Tap **OK**.
6. Enter the activation code or scan the QR Code.
7. Tap **NEXT**.

The Confirmation dialog box displays.

8. Tap **ACTIVATE**, and then **Done**.

The eSIM is now activated.

Deactivating an eSIM

Turn off an eSIM temporarily and re-activate it later.

1. On the device, establish an internet connection via Wi-Fi or cellular data with an installed SIM card.
2. Tap **Settings > Network & internet > SIMs**.

3. In the **Downloaded SIM** section, tap the name of the eSIM to deactivate.
4. Tap **Use SIM** switch to turn off the eSIM.
5. Tap **Yes**.

The eSIM is deactivated.

Erasing an eSIM Profile

Erasing an eSIM profile removes it completely from the device.



NOTE: After erasing an eSIM from the device, you cannot use it again.

1. On the device, establish an internet connection via Wi-Fi or cellular data with an installed SIM card.
2. Tap **Settings > Network & internet > SIMs**.
3. In the **Downloaded SIM** section, Tap the name of the eSIM.
4. Tap **Erase**.
The **Erase this downloaded SIM?** message displays.
5. Tap **Erase**.

The eSIM profile is now erased from the device.

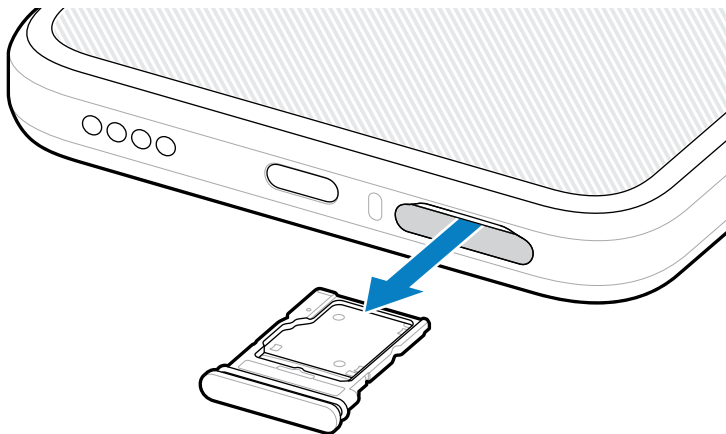
Installing the microSD Card

The microSD card slot provides secondary, non-volatile storage. For more information, refer to the documentation provided with the microSD card and follow the manufacturer's recommendations for use. It is strongly recommended that you format the microSD card on the device before use.

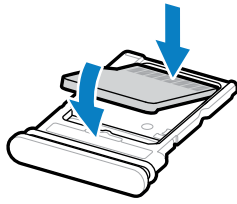


CAUTION: Follow proper electrostatic discharge (ESD) precautions to avoid damaging the microSD card. Proper ESD precautions include but are not limited to, working on an ESD mat and ensuring that the operator is properly grounded.

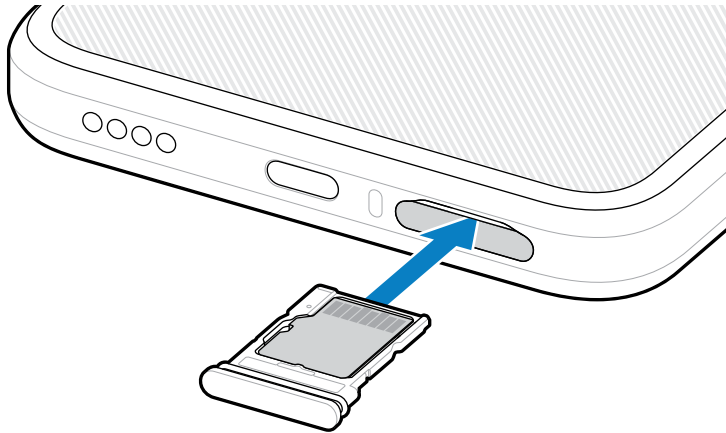
1. Pull the card holder out of the device.



2. Place the microSD card, contact end first, with contacts facing up, into the card holder.



3. Press the card down into the card holder and ensure that it seats properly.
4. Re-install the card holder.



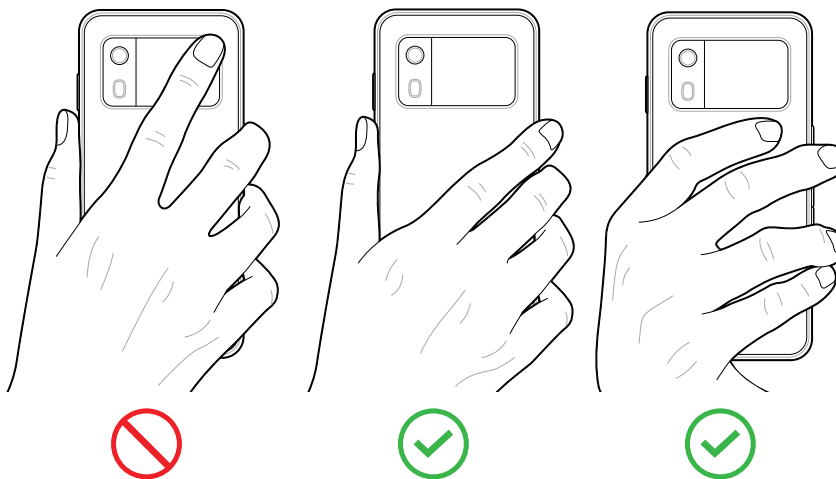
RFID Scanning Considerations

The following hand grips are recommended to ensure the RFID function works properly.

Optimal Hand Grips

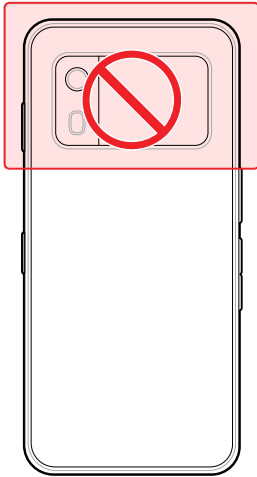


NOTE: When holding the device, ensure your hand and fingers are below the RFID antenna.





IMPORTANT: For optimal RFID performance, avoid placing hands and fingers on the RFID antenna.



Scanning with Integrated RFID

EM45's RFID reader uses the device's capabilities to communicate with RFID tags in an open environment. By emitting radio waves, the reader can detect, read, or write data to the tags within its range.

Using the 123RFID Mobile app

The 123RFID app demonstrates the device's functionality to read RFID tags.

- When opening the 123RFID Mobile app for the first time, it automatically connects to your device. Follow the prompts to complete regulatory requirements.
- From the **RFID** tab, start tag reading from the **Rapid** (Read) or **Inventory** screen.
- For more information on the 123RFID Mobile app, go to the [Zebra 123RFID Mobile Support](#) page or EM45 RFID User Guide.



Service Information

Repair services using Zebra-qualified parts are available for three years after the end of production and can be requested at zebra.com/support.

