TOUCH COMPUTER

TC501

Quick Start Guide

MN-005562-01EN Rev. A

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Model Number

This guide applies to the model numbers:

- TCX010 (WLAN)
- TCX01G (WWAN)
- TCX01J (WWAN)

Unpacking the TC501

This section describes how to unpack the TC501 and what to expect after unpackaging.

1. Carefully remove all protective material from the device and save the shipping container for later storage and shipping.
2. Verify that the following were received:
   - TC501 Touch Computer
   - Rechargeable Lithium-ion Battery
   - 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 that covers the display and camera window.

Features

This section lists the features of the TC501 touch computer.

Figure 1 Front and Side Views

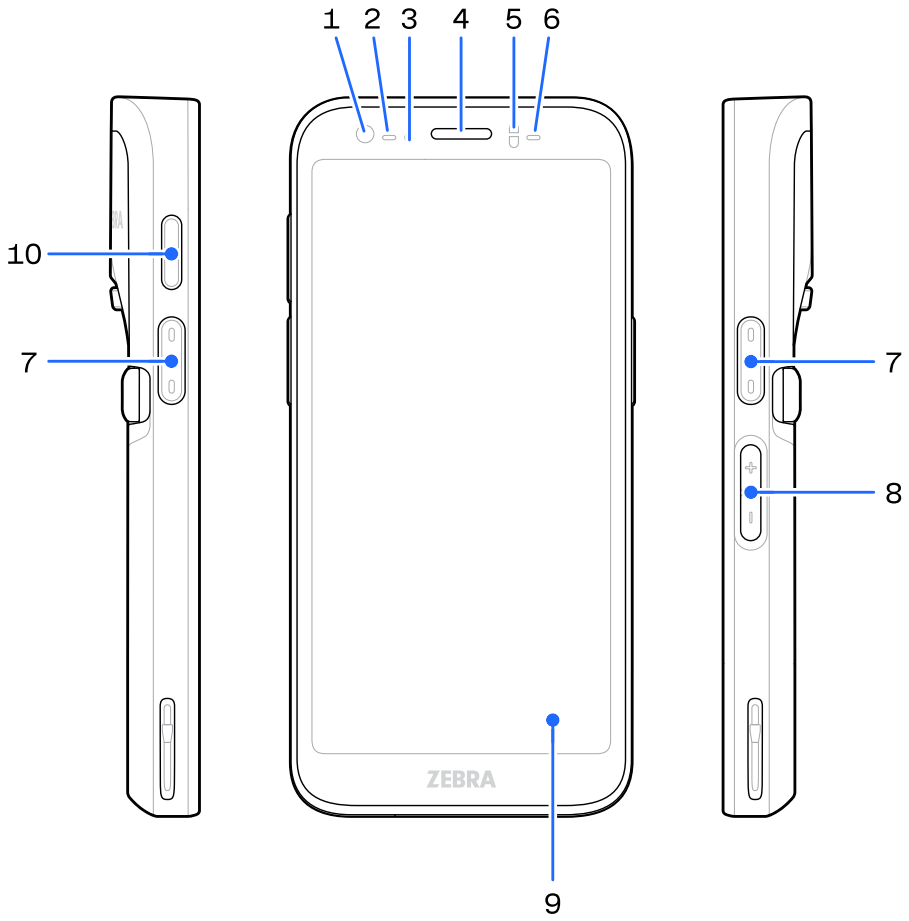


Table 1 Front and Side Views

Number	Item	Description
1	8MP Front Camera	Takes photos and videos.
2	Scan LED	Indicates data capture status.
3	Charging LED	Indicates battery charging status while charging and application generated notifications.
4	Speaker	Used for audio playback in handset mode and acts as one of the stereo speakers in speakerphone mode.
5	Proximity/Light Sensor	Determines proximity and ambient light for controlling display backlight intensity.
6	Scan LED	Indicates data capture status.
7	Scanner Button	Initiates barcode scanning (programmable).

Table 1 Front and Side Views (Continued)

Number	Item	Description
8	Volume Up/Down Button	Increase and decrease audio volume (programmable).
9	6 in. LCD Touchscreen	Displays all information needed to operate the device.
10	Push-to-Talk (PTT) Button	Initiates a Push-to-Talk (PTT) call (programmable).

Figure 2 Back and Top Views

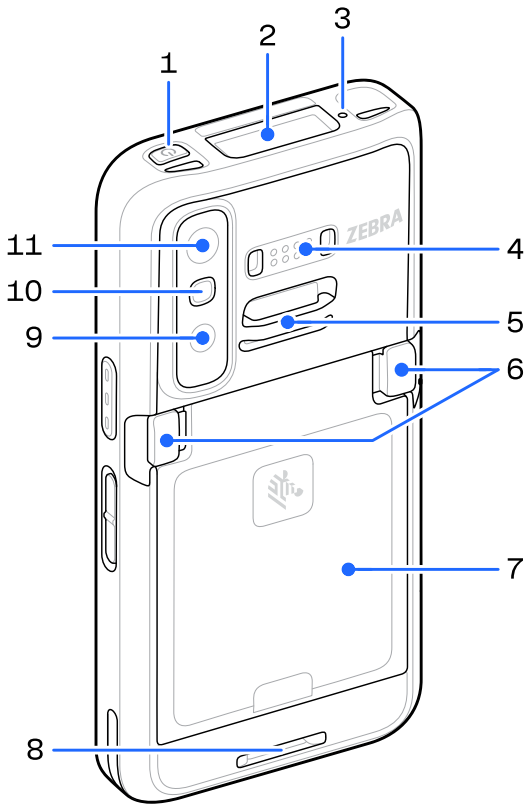


Table 2 Back and Top Views

Number	Item	Description
1	Power button	Turns the display on and off. Press and hold to reset the device, power off, take a screenshot, or swap battery.
2	Scanner	Scans barcodes.
3	Microphone	Records audio.
4	Common Back IO	Enables data input and output.
5	Upper Accessory Attachment Point	Provides a point for attaching optional accessories.

Table 2 Back and Top Views (Continued)

Number	Item	Description
6	Battery Release Latches	The latches to release the battery.
7	Battery	Provides power to the device.
8	Lower Accessory Attachment Point	Provides a point for attaching optional accessories.
9	Indirect Time-of-Flight (iTOF)/ Ultra-wide Camera	Takes iTOF/Ultra-wide photos and videos. **NOTE:** This feature is only available on select SKUs.
10	Flash LED Lens	Provides illumination for the camera in low light conditions.
11	50MP Rear Camera	Takes photos and videos.

Figure 3 Bottom View

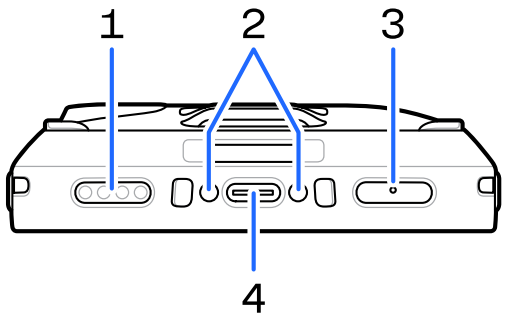


Table 3 Bottom View

Number	Item	Description
1	Speaker	Provides audio output for video and music playback. Provides audio in speakerphone mode.
2	Bottom IO Pins	Enables charging.
3	Microphone	Records audio.
4	USB-C 3.1 Port	Provides charging (primarily) and data communication with peripherals.

Setting Up the Device

This section describes setting up the TC501.

1. Install a SIM card (WWAN Only).
2. Install a micro Secure Digital (SD) card (optional).
3. Install the battery.
4. Install hand strap (optional).

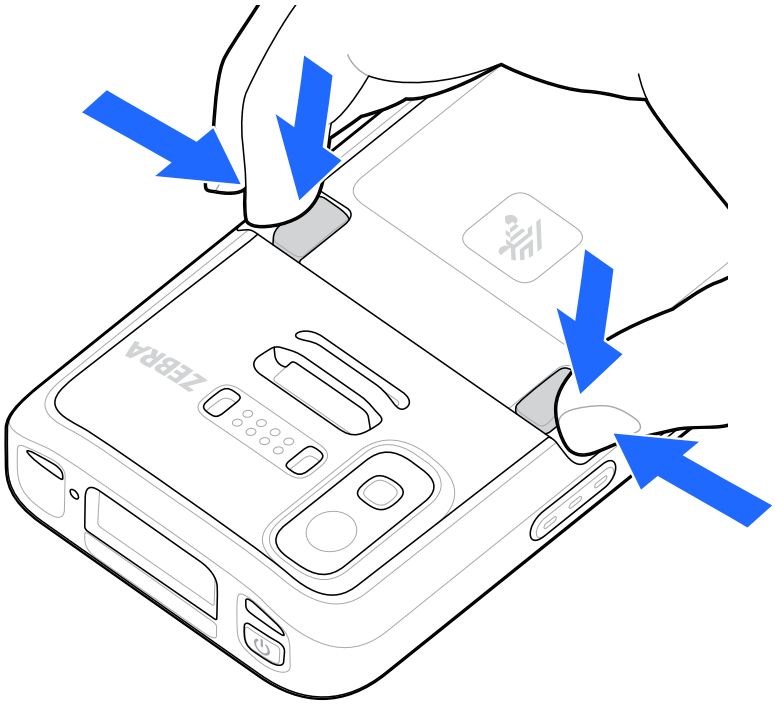
5. Charge the device.
6. Power on the device.

Installing a SIM Card (WWAN Only)

This section describes the steps to install a SIM card in your TC501.

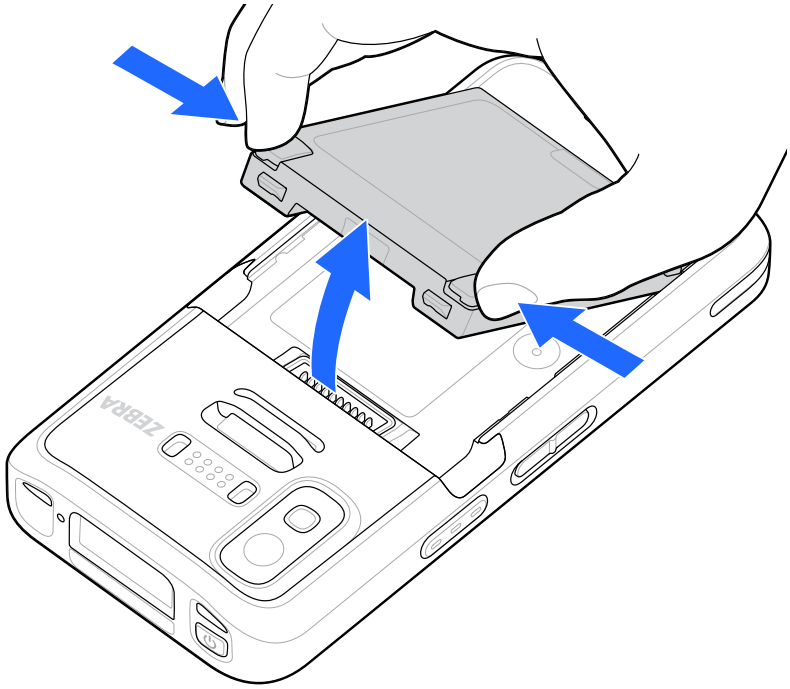
CAUTION: Follow proper electrostatic discharge (ESD) precautions to avoid damaging the SIM card. Proper ESD precautions include, but are not limited to, working on an ESD mat and ensuring the operator is properly grounded.

1. Power off the device.
2. Push both battery latches inward.

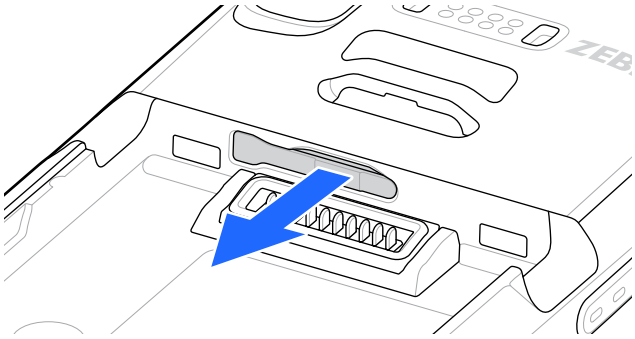


CAUTION: Do not attempt to insert fingers under the latches when pulling on the battery. Damage to the latches may occur.

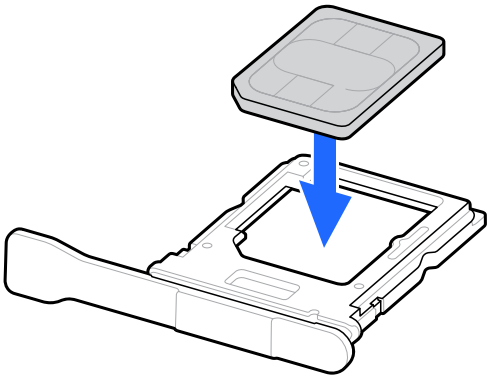
3. While gripping the battery latches, lift the battery out of the device.



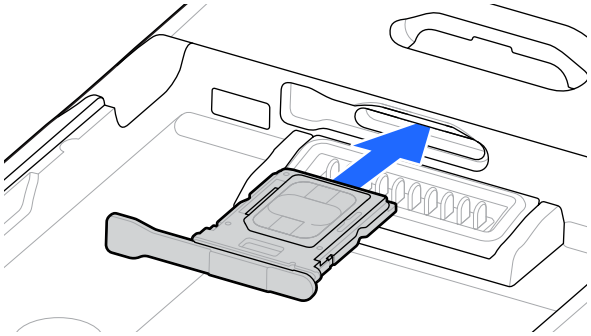
4. Pull the card holder out of the device.



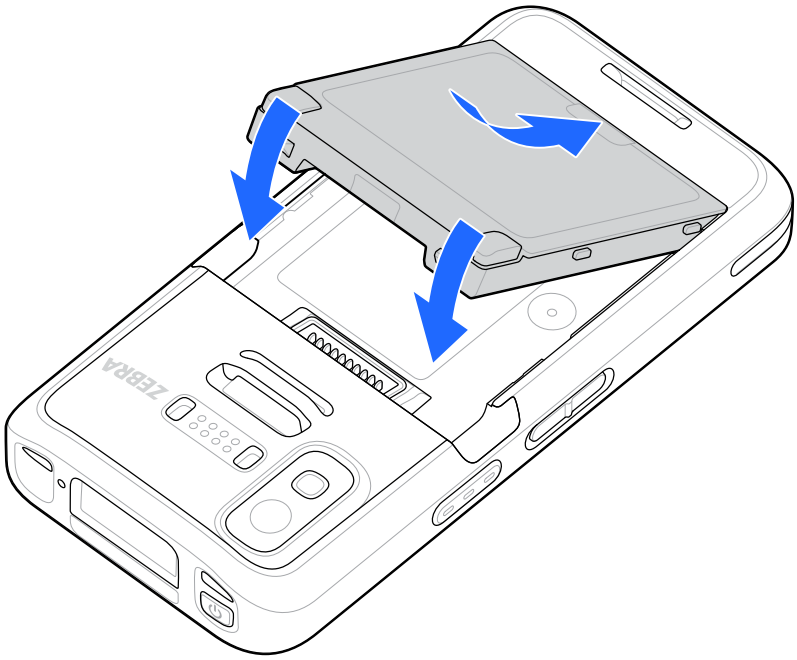
5. Place the SIM card into the card holder.



6. Insert the card holder back into the device.



7. Insert the battery, bottom first, into the battery compartment in the back of the device.



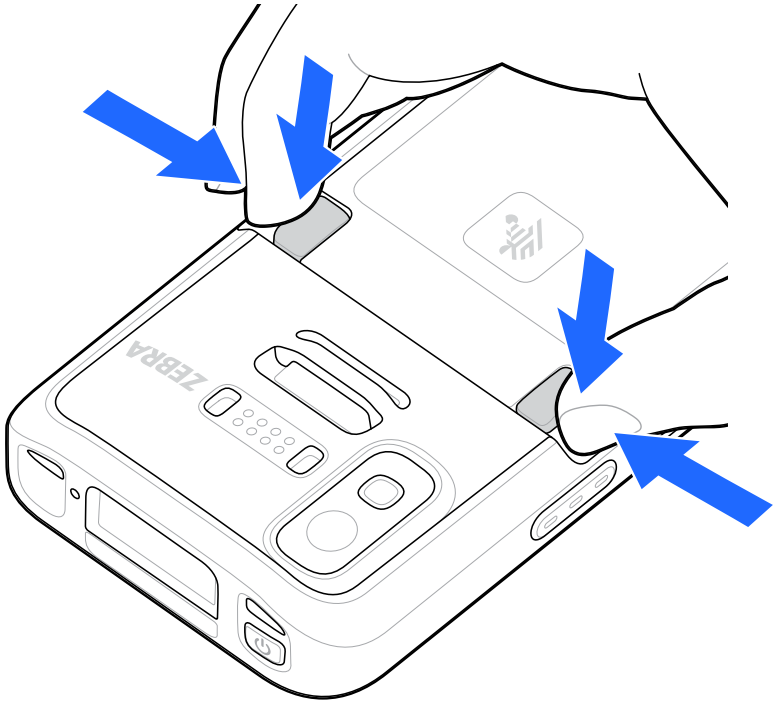
8. Press the battery down into the device until the release latches click into place.

Installing the MicroSD Card

This section describes the steps to install a microSD card in your TC501.

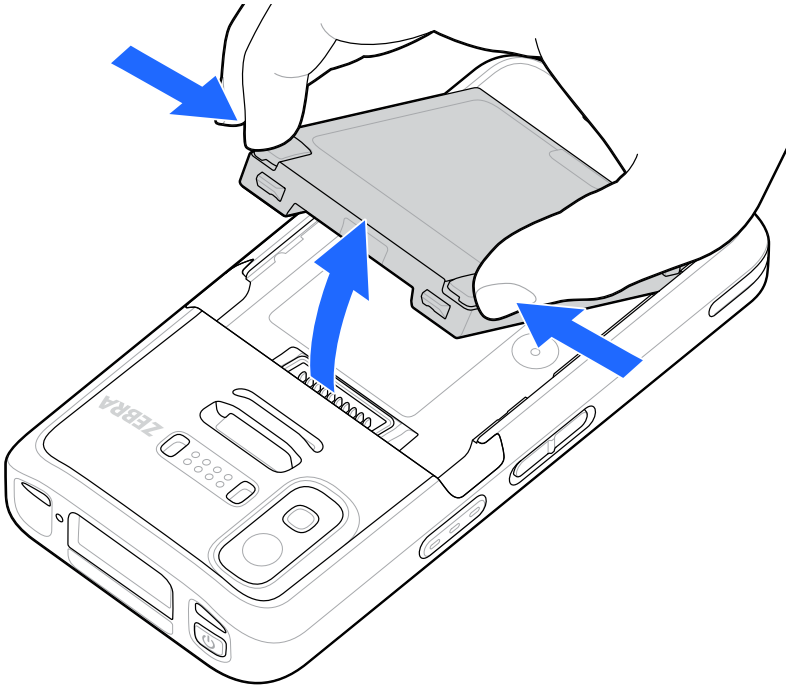
CAUTION: Follow proper electrostatic discharge (ESD) precautions to avoid damaging the microSD card. Proper ESD precautions include, but are not limited to, working on an ESD mat and ensuring the operator is properly grounded.

1. Power off the device.
2. Push both battery latches inward.

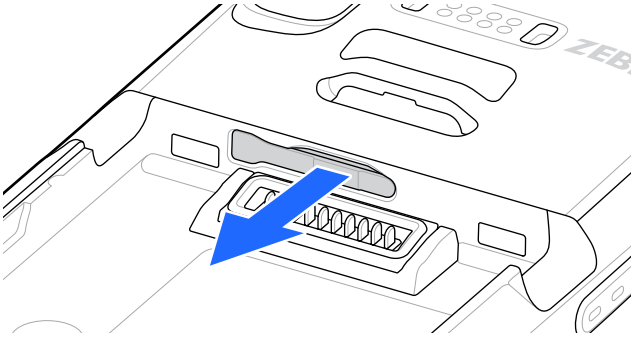


CAUTION: Do not attempt to insert fingers under the latches when pulling on the battery. Damage to the latches may occur.

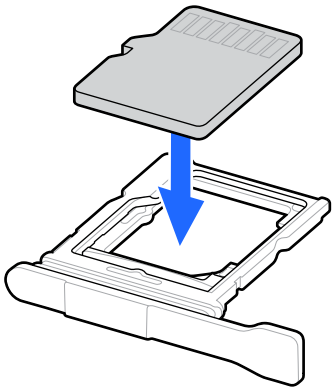
3. While gripping the battery latches, lift the battery out of the device.



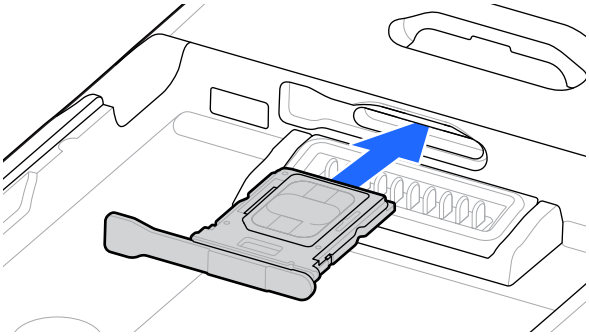
4. Pull the card holder out of the device.



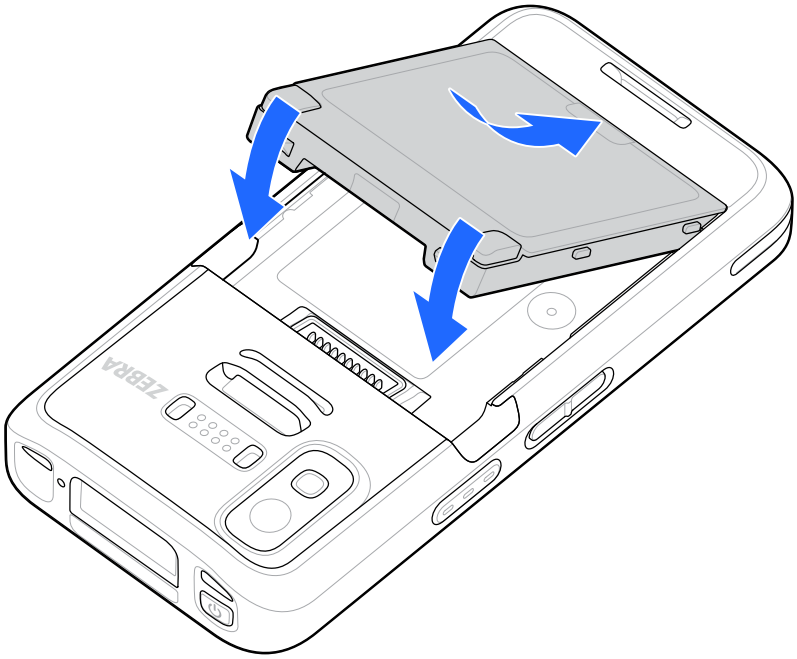
5. Flip over the card holder.
6. Place the microSD card into the card holder with the contacts facing up.



7. Flip over the card holder.
8. Insert the card holder back into the device.



9. Insert the battery, bottom first, into the battery compartment in the back of the device.



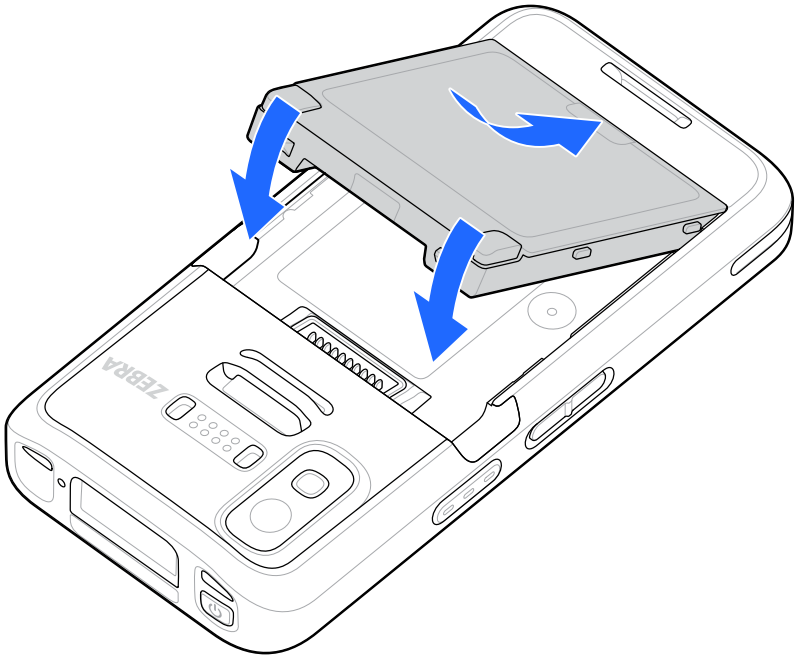
10. Press the battery down into the device until the release latches click into place.

Installing a Battery

This section describes how to install the TC501 battery.

NOTE: User modification of the device, particularly in the battery well, such as labels, asset tags, engravings, stickers, and so on, may compromise the intended performance of the device or accessories. Performance levels such as sealing (Ingress Protection (IP)), impact performance (drop and tumble), functionality, temperature resistance, etc. could be affected. DO NOT put any labels, asset tags, engravings, stickers, etc. in the battery well.

1. Insert the battery, bottom first, into the battery compartment in the back of the device.



2. Press the battery down into the device until the release latches click into place.

Using the Rechargeable Li-Ion Battery with BLE Beacon

This device utilizes a rechargeable Li-Ion battery to facilitate BLE Beacon. Once enabled, the battery transmits a BLE signal for up to seven days while the device is powered off due to battery depletion.

NOTE: The device transmits a Bluetooth beacon only when the device is powered off or in Airplane Mode.

For additional information on configuring the Secondary BLE settings, go to techdocs.zebra.com/emdk-for-android/14-0/mx/beaconmgr/.

Charging the Device

This section provides information for charging the device.

NOTE: Ensure that you follow the guidelines for battery safety described in the TC501 Product Reference Guide.

1. To charge the main battery, connect the charging accessory to the appropriate power source.
2. Insert the device into a cradle or attach to a cable. The device turns on and begins charging. The Charging/Notification LED blinks amber while charging, then turns solid green when fully charged.

The device's Charging/Notification LED indicates the status of the battery charging in the device. The battery charges from fully depleted to 70% in approximately 45 minutes. To achieve the optimal charging results, use only Zebra charging accessories and batteries. Charge batteries at room temperature with the device in sleep mode.

Charging the Spare Battery

This section provides information on charging a spare battery. Use only Zebra charging accessories and batteries to achieve optimal charging results.

1. Insert a spare battery into the spare battery slot.

2. Ensure the battery is seated properly.

The battery charges from fully depleted to 90% in approximately 4 hours. In many cases, the 90% charge provides enough for daily use. Depending on the usage profile, a full 100% charge may last approximately 14 hours.

Charging Indications

The charging/notification LED indicates charging status.

Table 4 Charging/Notification LED Charging Indicators

State	LED	Indications
Off		Device is not charging. Device is not inserted correctly in the cradle or connected to a power source. Charger/cradle is not powered.
Slow Blinking Amber (one blink every four seconds)		Device is charging.
Solid Green		Charging complete.
Solid Red		Device is either charging or fully charged, but the battery is at end of useful life.
Fast Blinking Red (two blinks/second)		Charging error but the battery is at end of useful life, for example: • Temperature is too low or too high. • Charging has gone on too long without completion (typically 12 hours).

Charging Temperature

Charge batteries in temperatures from 5°C to 40°C (41°F to 104°F). The device or cradle always performs battery charging in a safe and intelligent manner. At higher temperatures, the device or cradle may, for brief periods, alternately enable and disable battery charging to maintain the battery at an acceptable temperature. The device and cradle indicate when charging is disabled due to abnormal temperatures via the LED.

Charging Accessories

Use one of the following accessories to charge the device and/or spare battery.

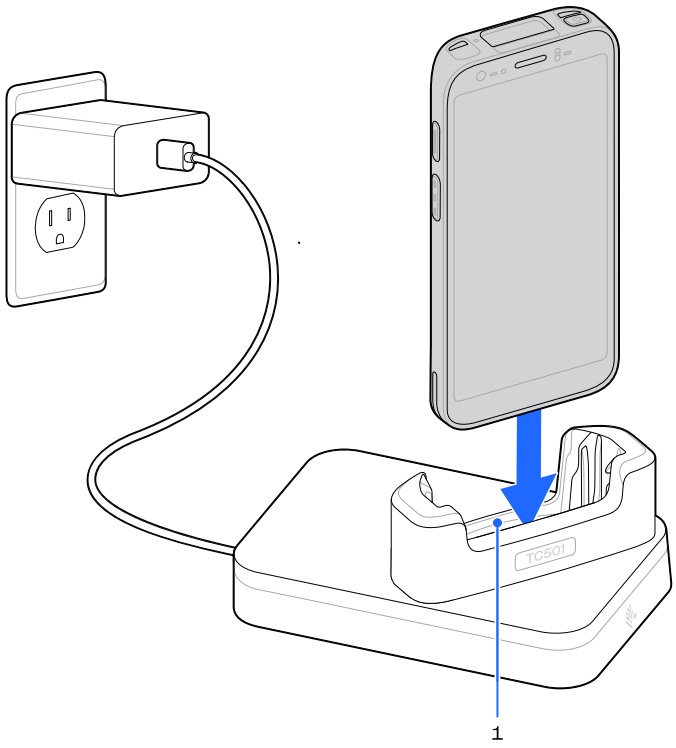
Description	Part Number	Charging		Communication	
		Device	Spare Battery	USB	Ethernet
1-Slot Fast-Charging Cradle	CRDCUP-TC5A-1DF	Yes	No	Yes	No
1-Slot Rugged Fast-Charging Cradle	CRDCUP-TC5A-1DF-B	Yes	No	Yes	No
1-Slot Ethernet Charging Cradle	CRD-TC5A-1SE	Yes	No	Yes	Yes
1-Slot Ethernet Rugged Charging Cradle	CRD-TC5A-1SE-B	Yes	No	Yes	Yes
1-Slot 2-Device Charging Cradle	CRDCUP-TC5A-2D	Yes	No	No	No
1-Slot 2-Device Rugged Charging Cradle	CRDCUP-TC5A-2D-B	Yes	No	No	No
1-Slot Device and Spare Battery Charging Cradle	CRD-TC5A-2SC1B	Yes	Yes	No	No
1-Slot Device and Spare Battery Rugged Charging Cradle	CRD-TC5A-2SC1B-B	Yes	Yes	No	No
1-Slot Device and Spare Battery Ethernet Charging Cradle	CRD-TC5A-2SE1B	Yes	Yes	Yes	Yes
1-Slot Device and Spare Battery Ethernet Rugged Charging Cradle	CRD-TC5A-2SE1B-B	Yes	Yes	Yes	Yes
4-Slot Battery Charger	CRDCUP-TC5A7A-4B	No	Yes	Yes	No
5-Slot Fast-Charging Cradle	CRD-TC5A-5SC5DF	Yes	No	No	No
5-Slot 5-Device Fast-Charging Rugged Cradle	CRD-TC5A-5SC5DF-B	Yes	No	No	No
5-Slot Ethernet Charging Cradle	CRD-TC5A-5SE5D	Yes	No	No	Yes
5-Slot 5-Device Ethernet Rugged Charging Cradle	CRD-TC5A-5SE5D-B	Yes	No	No	Yes
5-Slot Device and Spare Battery Charging Cradle	CRD-TC5A-5SC5D5B	Yes	Yes	No	No
5-Slot 5-Device and Spare Battery Rugged Charging Cradle	CRD-TC5A-5SC5D5B-B	Yes	Yes	No	No
5-Slot 10-Device Charging Cradle	CRD-TC5A-5SC10D	Yes	No	No	No
5-Slot 10-Device Rugged Charging Cradle	CRD-TC5A-5SC10D-B	Yes	No	No	No

1-Slot Fast-Charging Cradle

This section shows the 1-Slot Fast-Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 4 1-Slot Fast-Charging Cradle



1	Device Slot

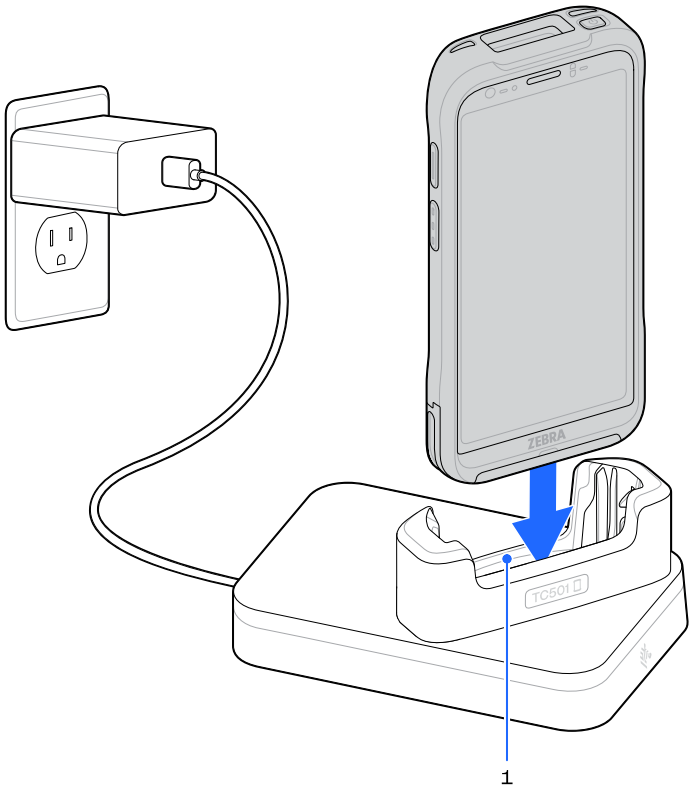
NOTE: Insert the device properly in the slot to charge it.

1-Slot Rugged Fast-Charging Cradle

This section shows the 1-Slot Rugged Fast-Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 5 1-Slot Rugged Fast-Charging Cradle



1	Device Slot

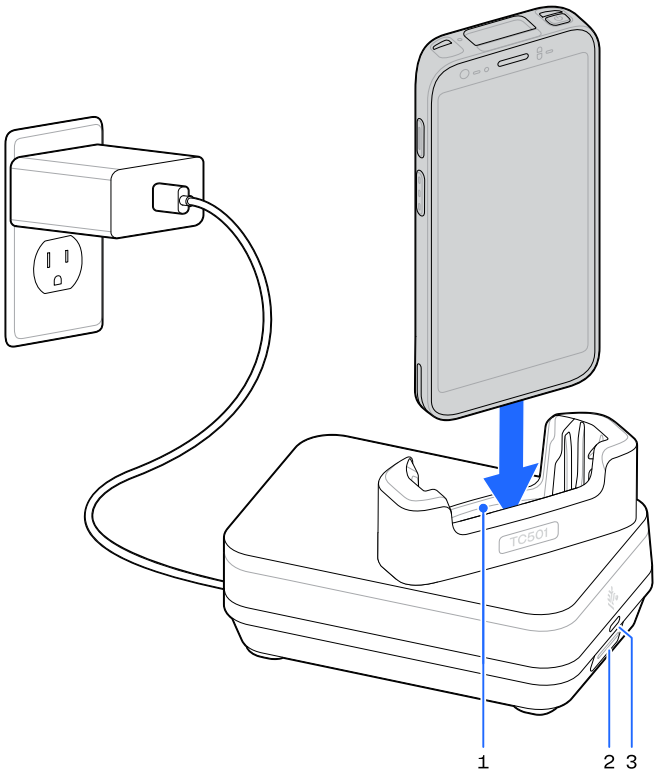
NOTE: Insert the device properly in the slot to charge it.

1-Slot Ethernet Charging Cradle

This section shows the 1-Slot Ethernet Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 6 1-Slot Ethernet Charging Cradle



1	Device Slot
2	Cradle Cup Release Button
3	Power LED

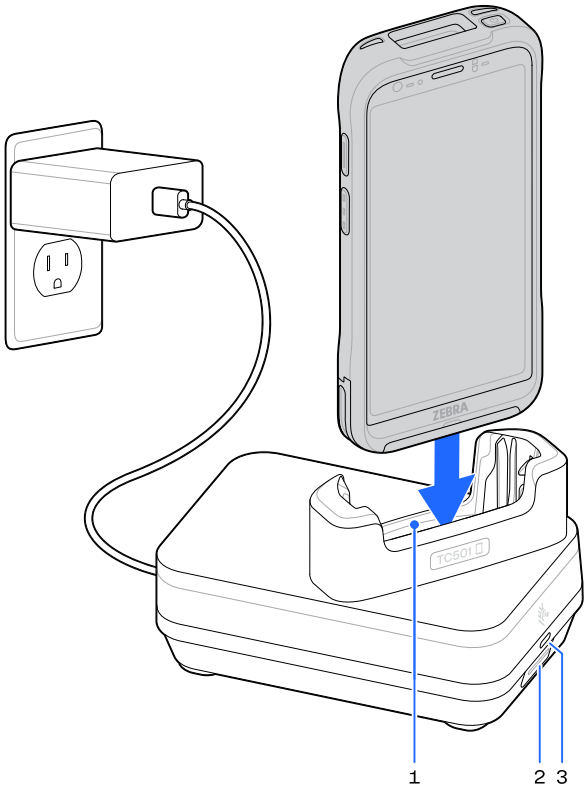
NOTE: Insert the device properly in the slot to charge it.

1-Slot Ethernet Rugged Charging Cradle

This section shows the 1-Slot Ethernet Rugged Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 7 1-Slot Ethernet Rugged Charging Cradle



1	Device Slot
2	Cradle Cup Release Button
3	Power LED

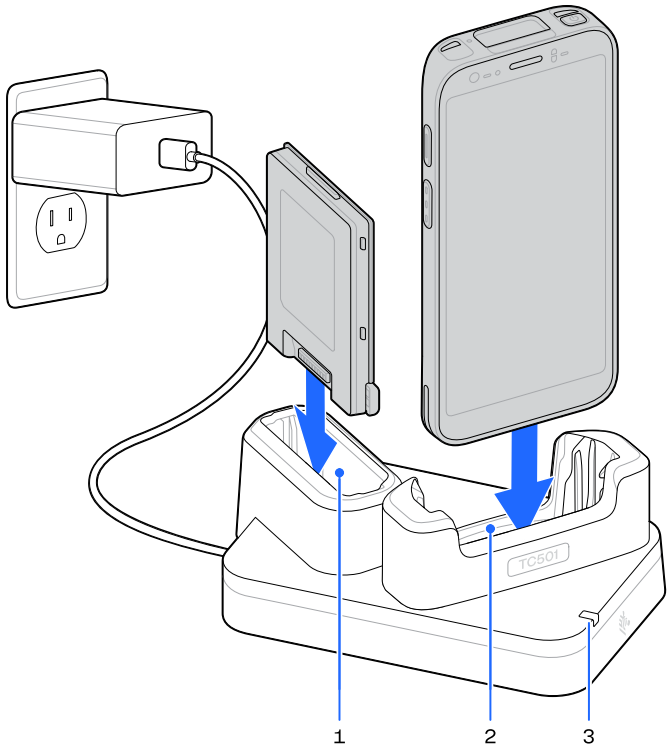
NOTE: Insert the device properly in the slot to charge it.

1-Slot Device and Spare Battery Charging Cradle

This section shows the 1-Slot Device and Spare Battery Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 8 1-Slot Device and Spare Battery Charging Cradle



1	Spare Battery Slot
2	Device Slot
3	Spare Battery Charging LED

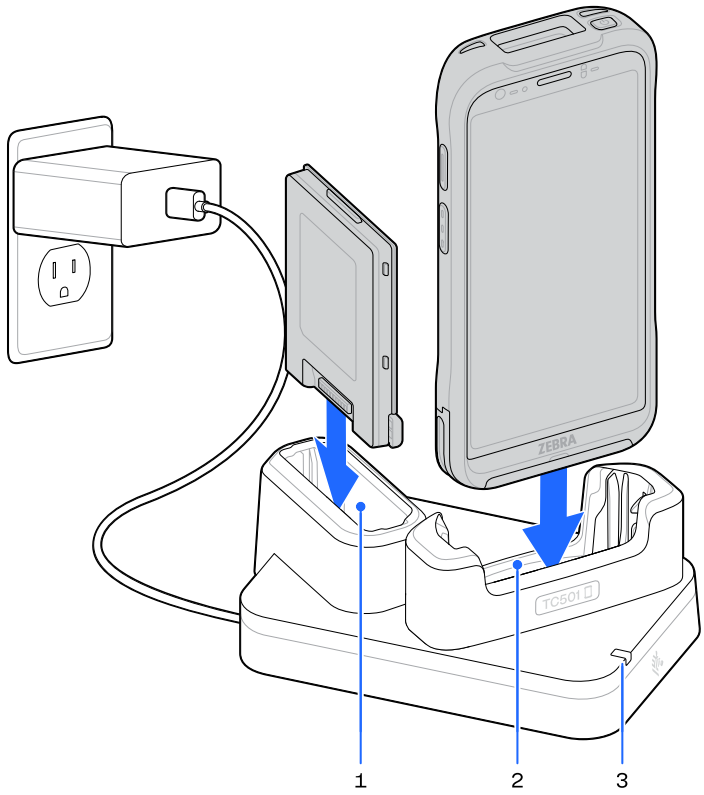
NOTE: Insert the device and battery properly in the slot to charge it.

1-Slot Device and Spare Battery Rugged Charging Cradle

This section shows the 1-Slot Device and Spare Battery Rugged Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 9 1-Slot Device and Spare Battery Rugged Charging Cradle



1	Spare Battery Slot
2	Device Slot
3	Spare Battery Charging LED

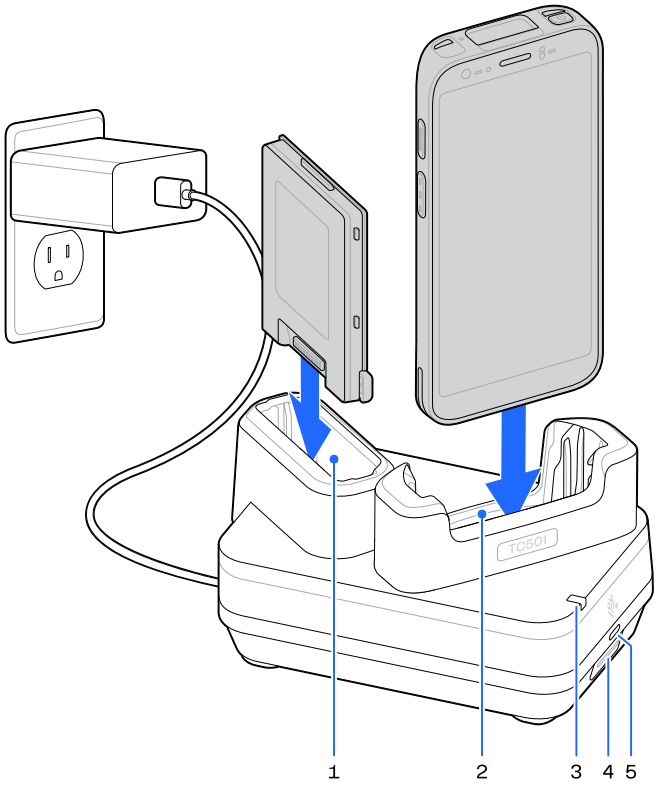
NOTE: Insert the device and battery properly in the slot to charge it.

1-Slot Device and Spare Battery Ethernet Charging Cradle

This section shows the 1-Slot Device and Spare Battery Ethernet Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 10 1-Slot Device and Spare Battery Ethernet Charging Cradle



1	Spare Battery Slot
2	Device Slot
3	Spare Battery Charging LED
4	Cradle Cup Release Button
5	Power LED

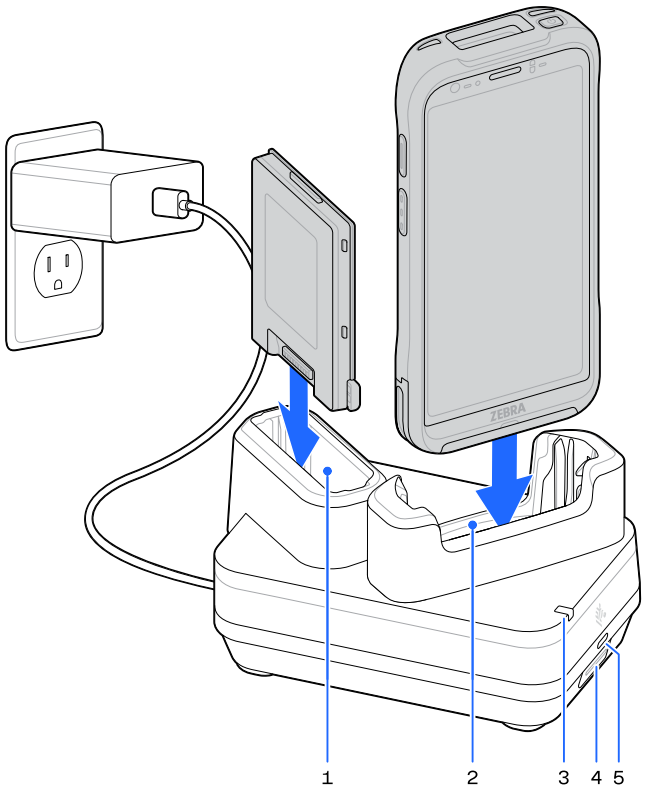
NOTE: Insert the device and battery properly in the slot to charge it.

1-Slot Device and Spare Battery Ethernet Rugged Charging Cradle

This section shows the 1-Slot Device and Spare Battery Ethernet Rugged Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 11 1-Slot Device and Spare Battery Ethernet Rugged Charging Cradle



1	Spare Battery Slot
2	Device Slot
3	Spare Battery Charging LED
4	Cradle Cup Release Button
5	Power LED

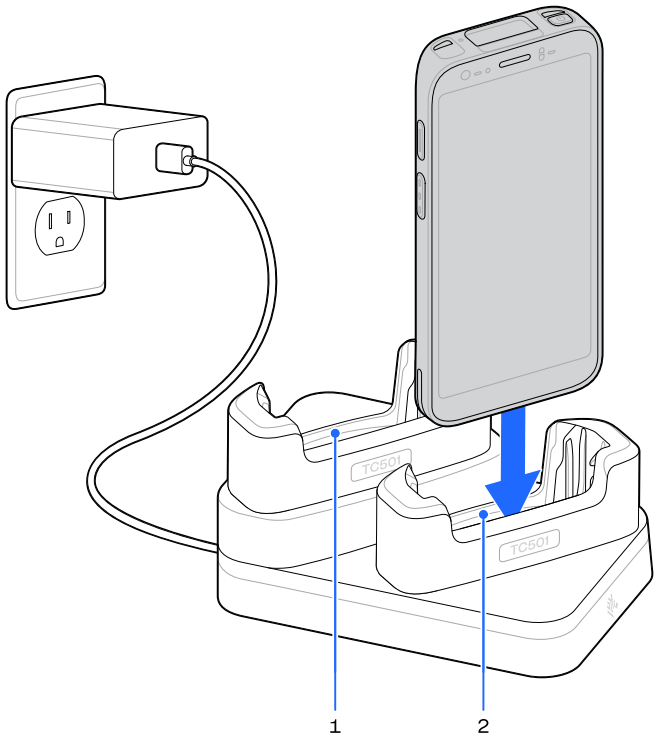
NOTE: Insert the device and battery properly in the slot to charge it.

1-Slot 2-Device Charging Cradle

This section shows the 1-Slot 2-Device Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 12 1-Slot 2-Device Charging Cradle



1	Device Slot
2	Device Slot

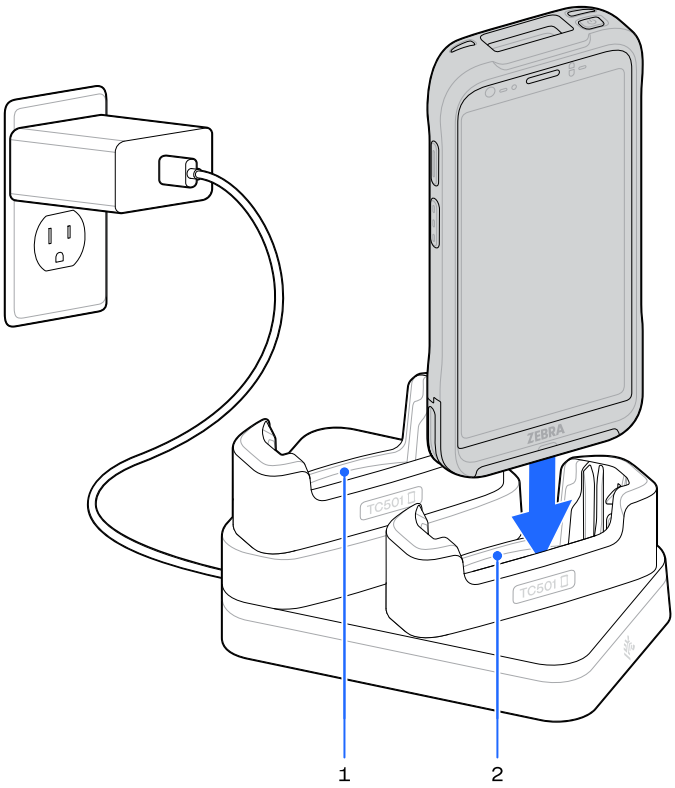
NOTE: Insert the device properly in the slot to charge it.

1-Slot 2-Device Rugged Charging Cradle

This section shows the 1-Slot 2-Device Rugged Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 13 1-Slot 2-Device Rugged Charging Cradle



1	Device Slot
2	Device Slot

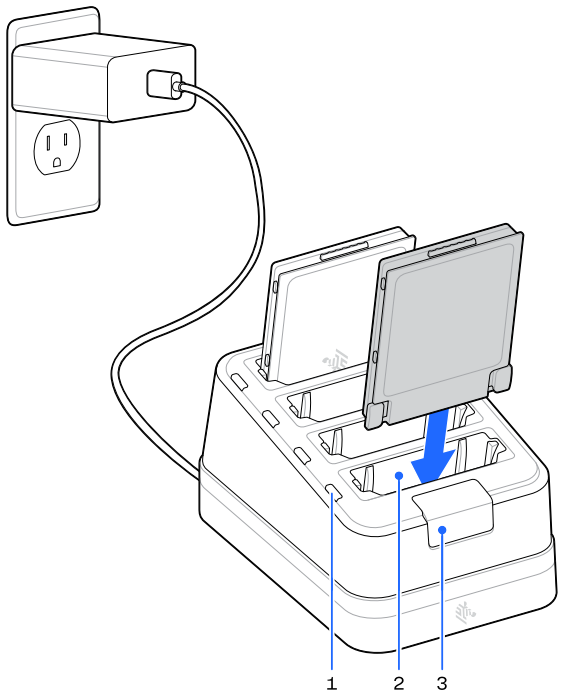
NOTE: Insert the device properly in the slot to charge it.

4-Slot Battery Charger

This section describes how to use the 4-Slot Battery Charger to charge up to four device batteries.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 14 4-Slot Battery Charger



1	Battery Charging LED
2	Battery Slot
3	Firmware Update Port

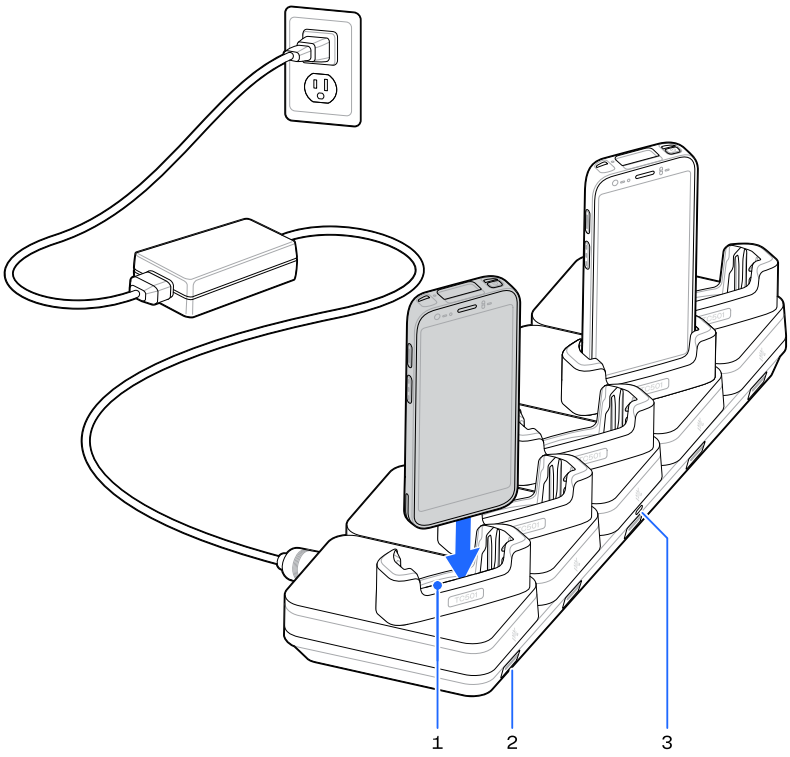
NOTE: Insert the battery properly in the slot to charge it.

5-Slot Fast-Charging Cradle

This section shows the 5-Slot Fast-Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 15 5-Slot Fast-Charging Cradle



1	Device Slot
2	Cradle Cup Release Button
3	Power LED

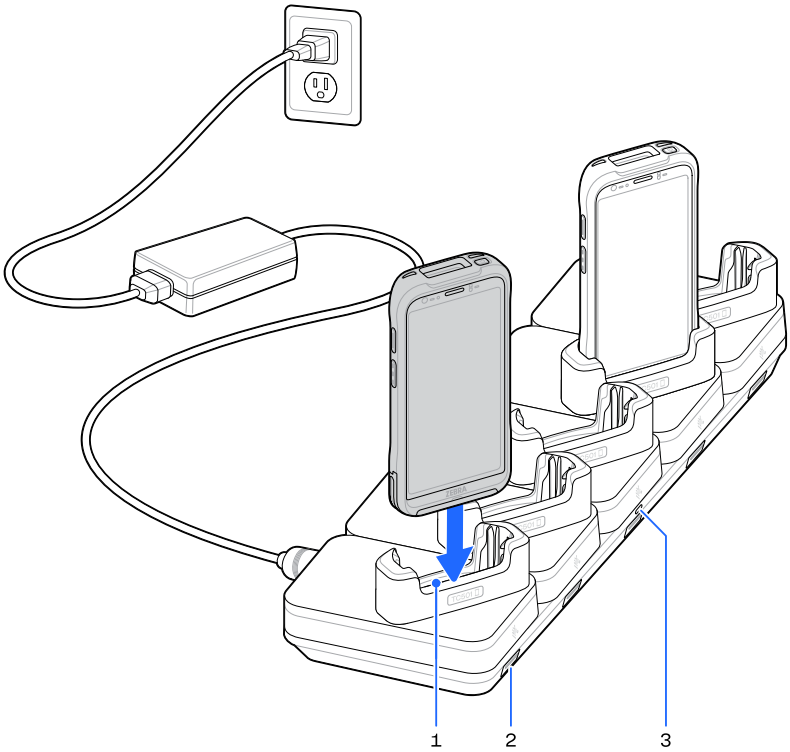
NOTE: Insert the device properly in the slot to charge it.

5-Slot Rugged Fast-Charging Cradle

This section shows the 5-Slot Rugged Fast-Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 16 5-Slot Rugged Fast-Charging Cradle



1	Device Slot
2	Cradle Cup Release Button
3	Power LED

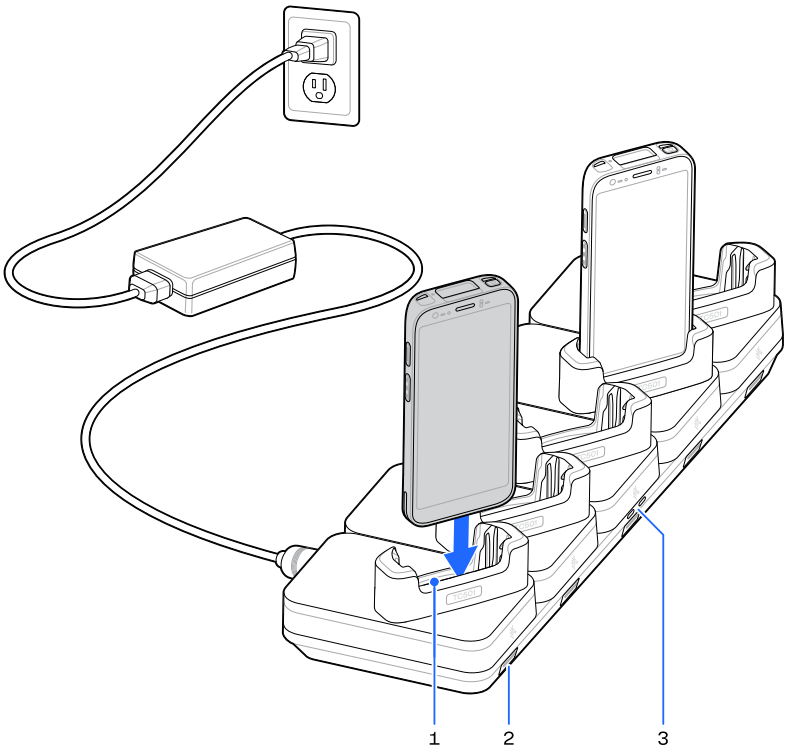
NOTE: Insert the device properly in the slot to charge it.

5-Slot Ethernet Charging Cradle

This section shows the 5-Slot Ethernet Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 17 5-Slot Ethernet Charging Cradle



1	Device Slot
2	Cradle Cup Release Button
3	Power LED

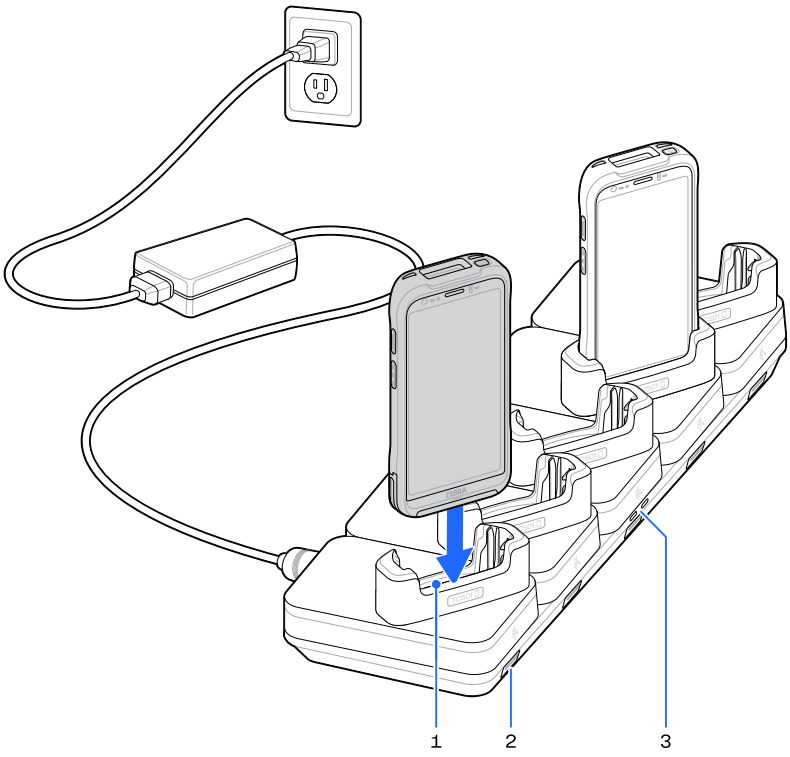
NOTE: Insert the device properly in the slot to charge it.

5-Slot Ethernet Rugged Charging Cradle

This section shows the 5-Slot Ethernet Rugged Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 18 5-Slot Ethernet Rugged Charging Cradle



1	Device Slot
2	Cradle Cup Release Button
3	Power LED

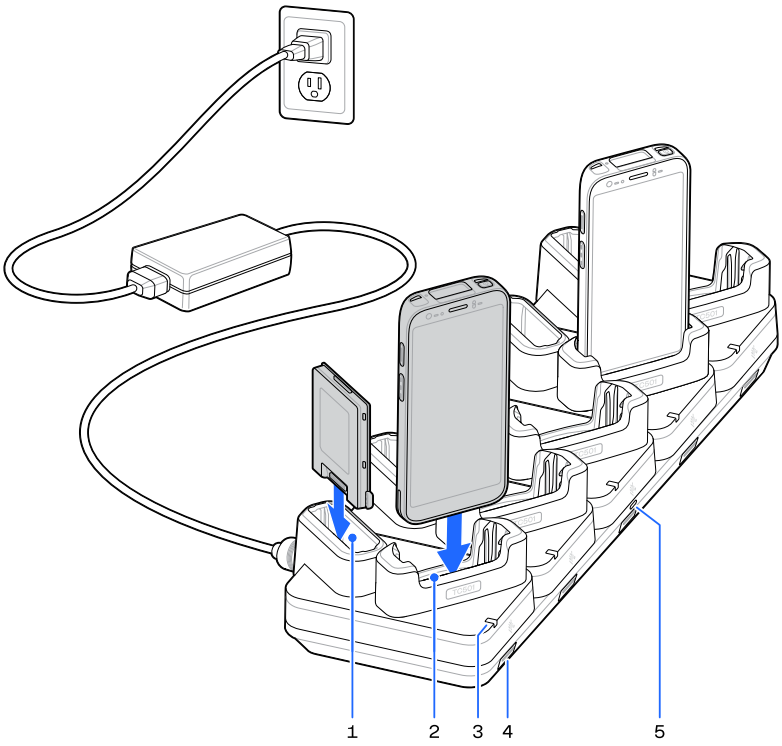
NOTE: Insert the device properly in the slot to charge it.

5-Slot Charging Cradle for Devices and Spare Batteries

This section shows the 5-Slot Charging Cradle for Devices and Spare Batteries.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 19 5-Slot Charging Cradle for Devices and Spare Batteries



1	Spare Battery Slot
2	Device Slot
3	Spare Battery Charging LED
4	Cradle Cup Release Button
5	Power LED

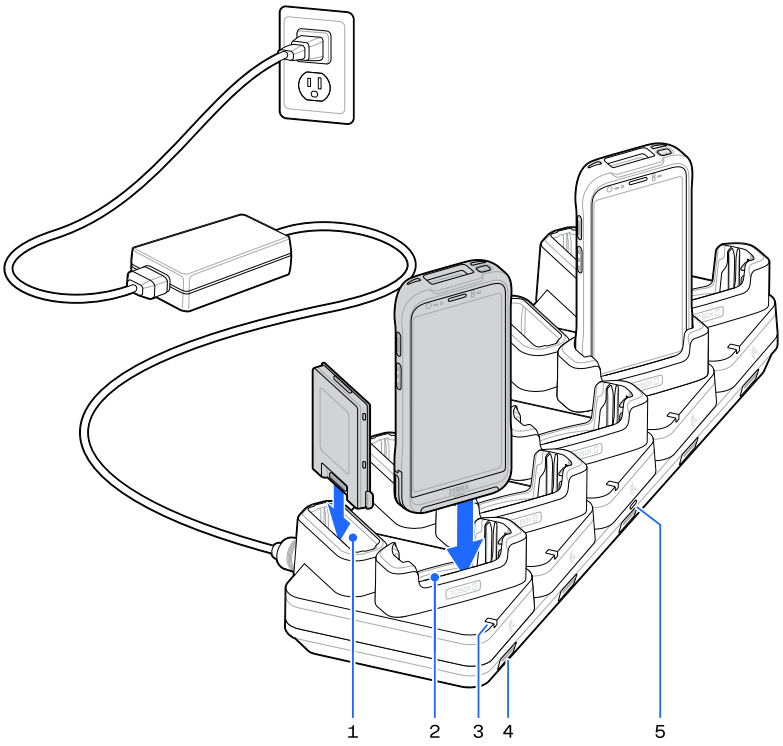
NOTE: Insert the device and battery properly in the slot to charge it.

5-Slot Rugged Charging Cradle for Devices and Spare Batteries

This section shows the 5-Slot Rugged Charging Cradle for Devices and Spare Batteries.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 20 5-Slot Rugged Charging Cradle for Devices and Spare Batteries



1	Spare Battery Slot
2	Device Slot
3	Spare Battery Charging LED
4	Cradle Cup Release Button
5	Power LED

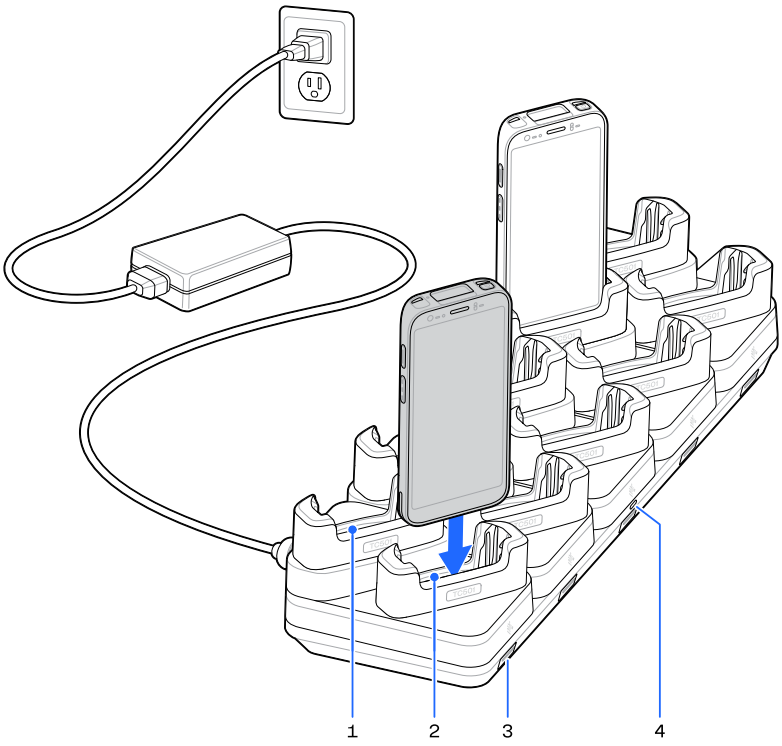
NOTE: Insert the device and battery properly in the slot to charge it.

5-Slot 10-Devices Charging Cradle

This section shows the 5-Slot 10-Devices Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 21 5-Slot 10-Devices Charging Cradle



1	Spare Battery Slot
2	Device Slot
3	Cradle Cup Release Button
4	Power LED

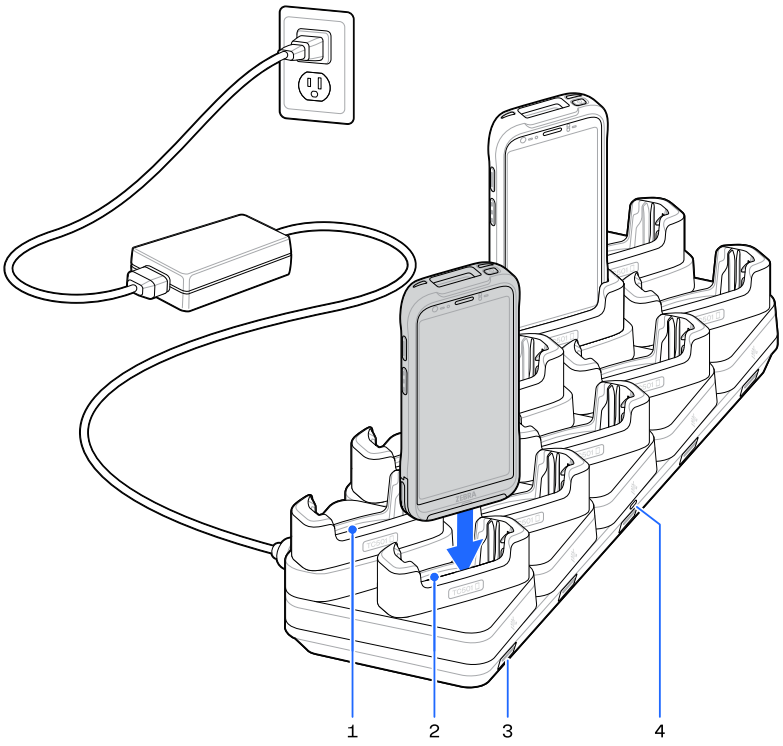
NOTE: Insert the device properly in the slot to charge it.

5-Slot 10-Devices Rugged Charging Cradle

This section shows the 5-Slot 10-Devices Rugged Charging Cradle.

CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

Figure 22 5-Slot 10-Devices Rugged Charging Cradle

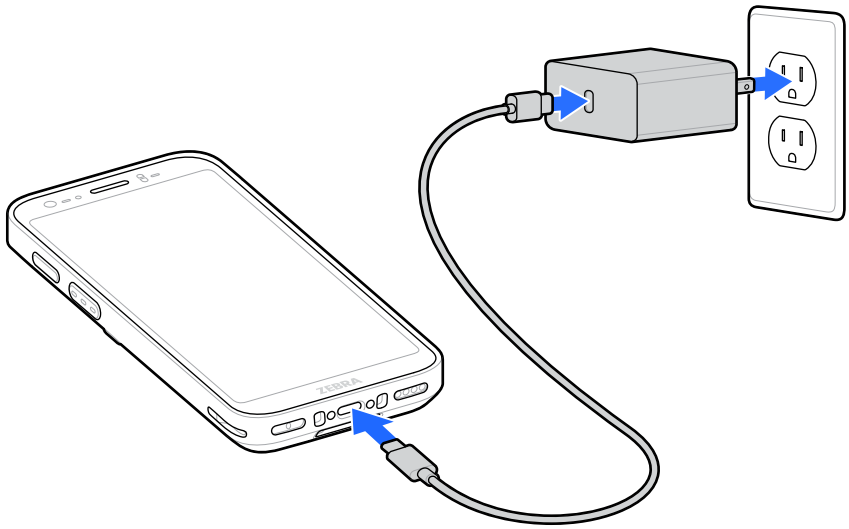


1	Spare Battery Slot
2	Device Slot
3	Cradle Cup Release Button
4	Power LED

NOTE: Insert the device properly in the slot to charge it.

Charge/USB-C Cable

The Charge/USB-C cable is used to charge the device's battery and to facilitate data transfer between the device and a host computer.

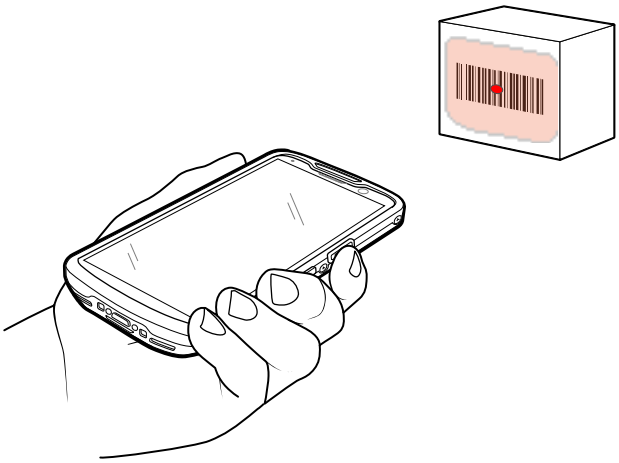


Scanning with the Device

To read a barcode, a scan-enabled application is required. The device contains the DataWedge application that allows the user to enable the imager, decode the barcode data and display the barcode content.

NOTE: The AC670 imager displays the green dash-dot-dash aimer. The SR500 and SR560 imagers display a red dot aimer.

1. Ensure that an application is open on the device and a text field is in focus (text cursor in text field).
2. Point the exit window on the top of the device at a barcode.



3. Press and hold the scan button.

   To assist in aiming, the red LED aiming pattern and red aiming dot turn on for the SR500 and SR560 imagers, and the green LED aiming pattern and green dash-dot-dash turn on for the AC670 imager.

NOTE: When the device is in Picklist mode, the imager does not decode the barcode until the crosshair or aiming dot touches the barcode.

4. Ensure the barcode is within the area formed in the aiming pattern. The aiming dot is used for increased visibility in bright lighting conditions.

Figure 23 Aiming Pattern

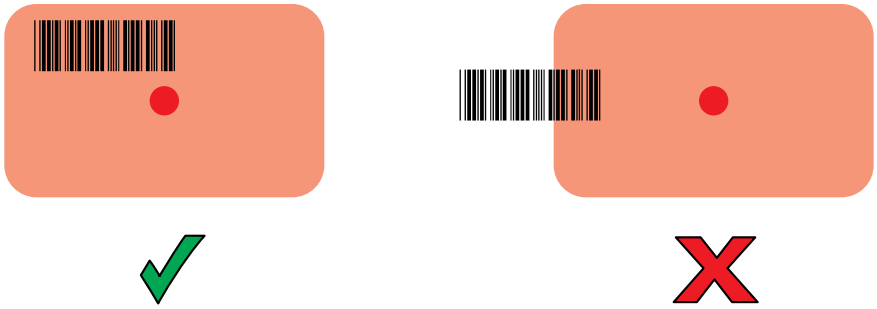
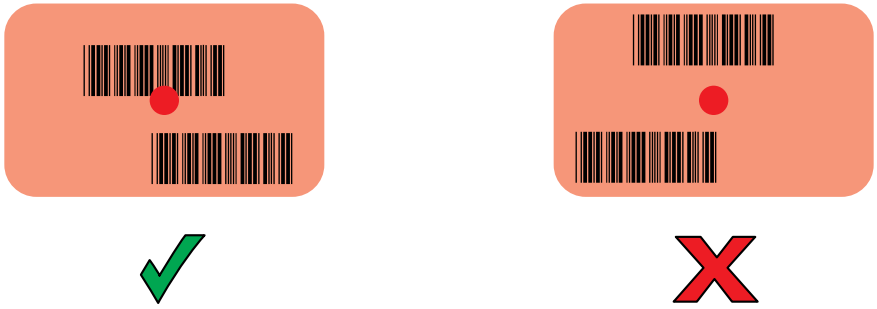


Figure 24 Pick List Mode with Multiple Barcodes in Aiming Pattern



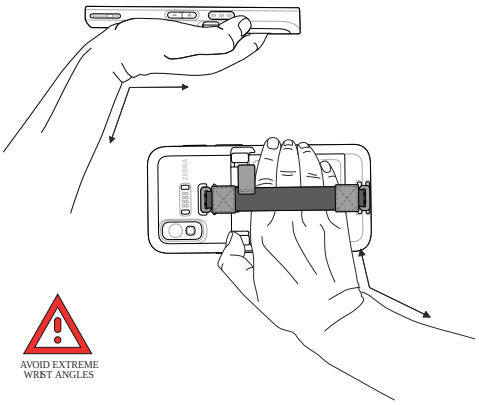
5. The Data Capture LED lights green and a beep sounds, by default, to indicate the barcode was decoded successfully.
6. Release the scan button.

NOTE: Imager decoding usually occurs instantaneously. The device repeats the steps required to take a digital picture (image) of a poor or difficult barcode as long as the scan button remains pressed.

7. The barcode content data displays in the text field.

Ergonomic Considerations

Avoid extreme wrist angles when using the device.



Service Information

If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at: zebra.com/support.

When contacting support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software/firmware type and version number

Zebra responds to calls by email, telephone, or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Customer Support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your Zebra business product from a Zebra business partner, contact that business partner for support.