

# TC53e Touch Computer



**ZEBRA**

## Quick Start Guide

2023/11/20

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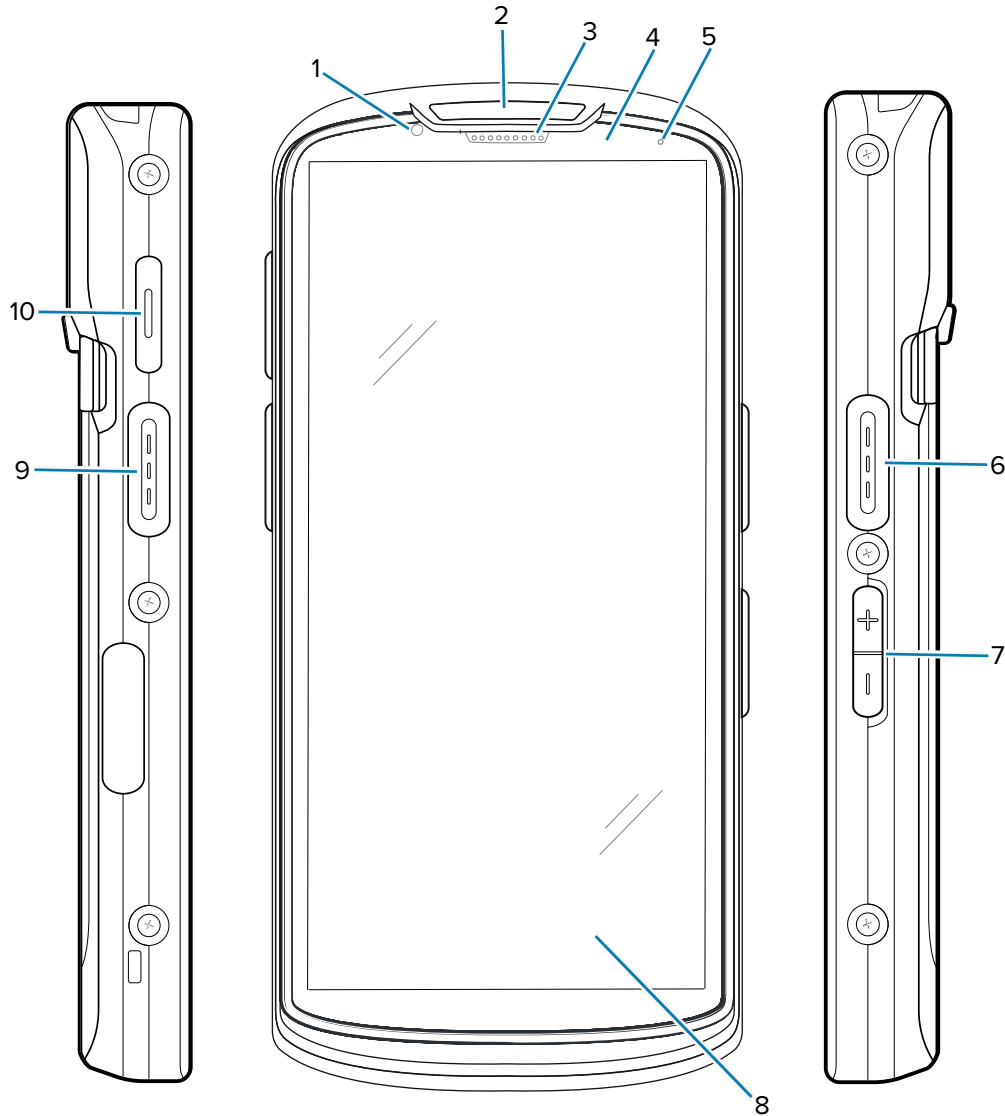
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## Features

This section lists the features of the TC53e touch computer.

**Figure 1** Front and Side Views



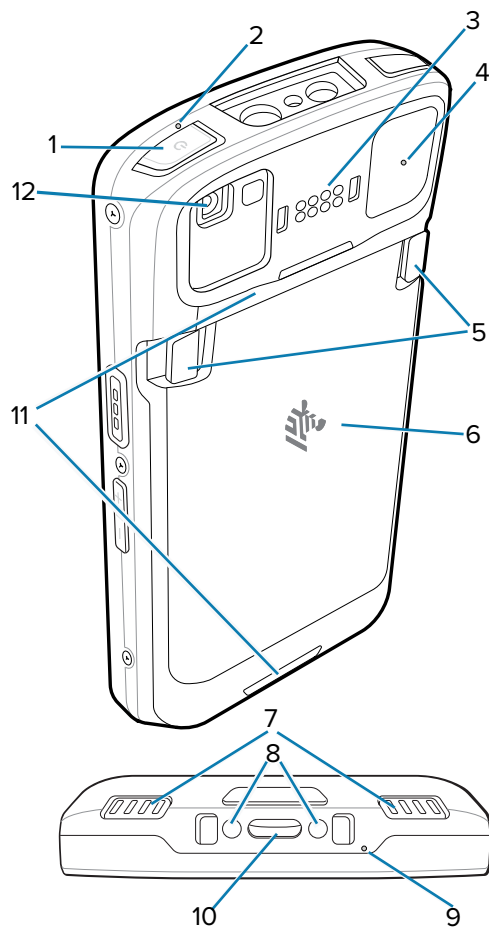
**Table 1** TC53e Front and Side Items

| Number | Item                   | Description                                                                         |
|--------|------------------------|-------------------------------------------------------------------------------------|
| 1      | Front camera (8MP)     | Takes photos and videos.                                                            |
| 2      | Scan LED               | Indicates data capture status.                                                      |
| 3      | Receiver               | Use for audio playback in Handset mode.                                             |
| 4      | Proximity/light sensor | Determines proximity and ambient light for controlling display backlight intensity. |

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**Table 1** TC53e Front and Side Items (Continued)

| Number | Item                   | Description                                                                               |
|--------|------------------------|-------------------------------------------------------------------------------------------|
| 5      | Battery status LED     | Indicates battery charging status while charging and application-generated notifications. |
| 6, 9   | Scan button            | Initiates data capture (programmable).                                                    |
| 7      | Volume up/down button  | Increase and decrease audio volume (programmable).                                        |
| 8      | 6 in. LCD touch screen | Displays all information needed to operate the device.                                    |
| 10     | PTT button             | Typically used for PTT communications.                                                    |

**Figure 2** Back, Top, and Bottom View

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**Table 2** TC53e Back, Top, and Bottom Items

| Number  | Item                          | Description                                                                                |
|---------|-------------------------------|--------------------------------------------------------------------------------------------|
| 1       | Power button                  | Turns the display on and off. Press and hold to power off, restart, or lock the device.    |
| 2, 4, 9 | Microphone                    | Use for communications in Handset/Handsfree mode, audio recording, and noise cancellation. |
| 3       | Back common I/O 8 pins        | Provides host communications, audio, and device charging via cables and accessories.       |
| 5       | Battery release latches       | Pinch both latches in and lift up to remove the battery.                                   |
| 6       | Battery                       | Provides power to the device.                                                              |
| 7       | Speaker                       | Provides audio output for video and music playback. Provides audio in speakerphone mode.   |
| 8       | DC input pins                 | Power/ground for charging (5V through 9V).                                                 |
| 10      | USB Type C and 2 charge pins  | Provides power to the device using an I/O USB-C interface with 2 charge pins.              |
| 11      | Hand strap attachment points  | Attachment points for the hand strap.                                                      |
| 12      | Rear camera (16MP) with flash | Takes photos and videos with flash to provide illumination for the camera.                 |

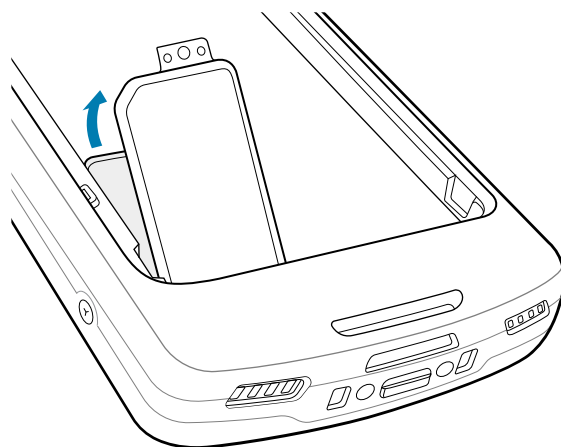
## Installing a MicroSD Card

This section describes how to install a MicroSD card.



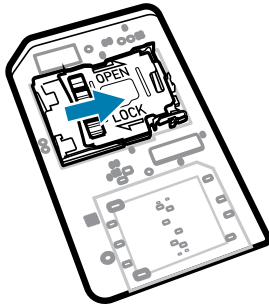
**CAUTION—ESD:** Follow proper electrostatic discharge (ESD) precautions to avoid damaging the MicroSD card. Proper ESD precautions include, but are not limited to, working on an ESD mat and ensuring the operator is properly grounded.

1. Lift the access door.

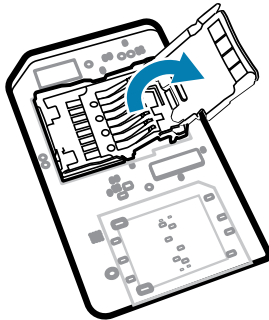


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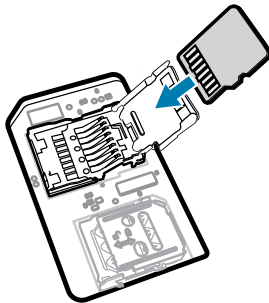
2. Slide the microSD card holder to the Open position.



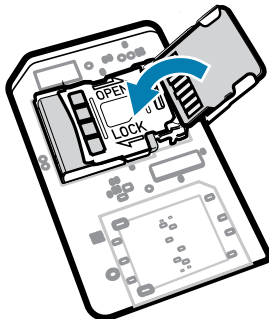
3. Lift the microSD card holder door.



4. Insert the microSD card into the card holder. Ensure that the card slides into the holding tabs on each side of the door.

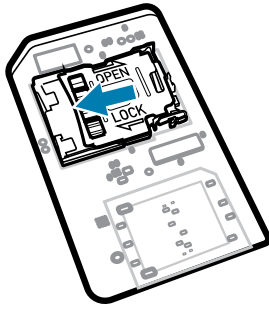


5. Close the microSD card holder.



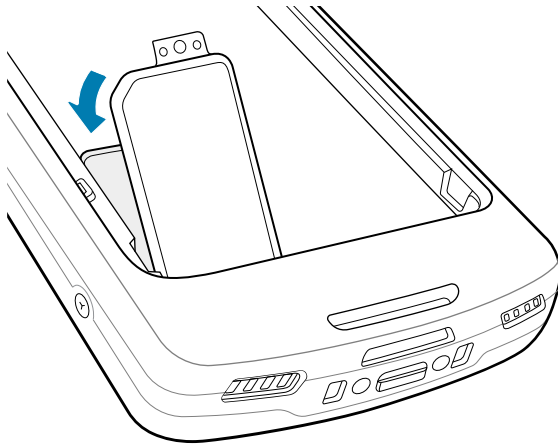
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6. Slide the microSD card holder to the Lock position.



**NOTE:** The access door must be replaced and securely sealed to ensure proper device sealing.

7. Reinstall the access door.



## Installing the Battery

This section describes how to install a battery into the device.

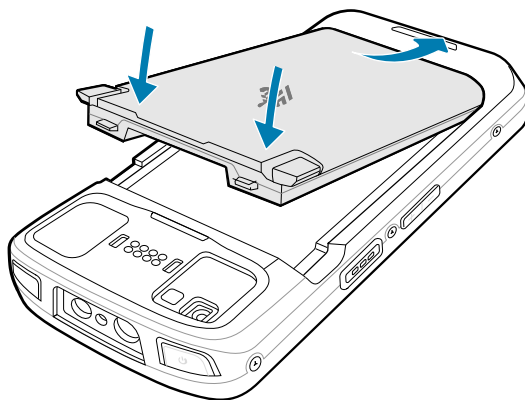


**NOTE:** Do not put any labels, asset tags, engravings, stickers, or other objects in the battery well. Doing so may compromise the intended performance of the device or accessories. Performance levels, such as sealing [Ingress Protection (IP)], impact performance (drop and tumble), functionality, or temperature resistance, could be affected.

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

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2. Press the battery down until it snaps into place.



## Using the Rechargeable Li-Ion Battery with BLE Beacon

This device utilizes a rechargeable Li-Ion battery to facilitate Bluetooth Low Energy (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, see [techdocs.zebra.com/emdk-for-android/11-0/mx/beaconmgr/](https://techdocs.zebra.com/emdk-for-android/11-0/mx/beaconmgr/).

## Charging the Device

Before using the device for the first time, charge the main battery until the green LED Charging/Notification remains lit. To charge the device, use a cable or a cradle with the appropriate power supply.

To achieve optimal charging results, use only Zebra charging accessories and batteries. Charge batteries at room temperature with the device in sleep mode.

A standard battery charges from fully depleted to 90% in approximately 2 hours and from fully depleted to 100% in approximately 3 hours. In many cases, a 90% charge provides enough charge for daily use. Depending on the usage profile, a full 100% charge may last for approximately 14 hours of use.

The device or accessory always performs battery charging in a safe and intelligent manner. The device or accessory indicates when charging is disabled due to abnormal temperatures via its LED, and a notification appears on the device display.

| Temperature                                         | Battery Charging Behavior                                      |
|-----------------------------------------------------|----------------------------------------------------------------|
| 20 to 45°C (68°F to 113°F)                          | Optimal charging range.                                        |
| 0 to 20°C (32 to 68°F)<br>45 to 50°C (113 to 122°F) | Charging slows to optimize the JEITA requirements of the cell. |
| Below 0°C (32°F)<br>Above 50°C (122°F)              | Charging stops.                                                |

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| Temperature        | Battery Charging Behavior |
|--------------------|---------------------------|
| Above 58°C (136°F) | The device shuts down.    |

To charge the main battery:

1. Connect the charging accessory to the appropriate power source.
2. Insert the device into a cradle or attach to a powered cable (minimum 9 volts / 2 amps). The device turns on and begins charging. The Charging/Notification LED blinks amber while charging, then turns solid green when fully charged.

## Charging the Spare Battery

This section provides information on charging a spare battery. To achieve optimal charging results, use only Zebra charging accessories and batteries.

1. Insert a spare battery into the spare battery slot.
2. Ensure the batter is seated properly.

The Spare Battery Charging LED blinks indicating charging.

The battery charges from fully depleted to 90% in approximately 2.5 hours and from fully depleted to 100% in approximately 3.5 hours. In many cases, the 90% charge provides plenty of charge for daily use. Depending on the usage profile, a full 100% charge may last for approximately 14 hours of use.

## Charging Indicators

The charging/notification LED indicates the charging status.

**Table 3** Charging/Notification LED Charging Indicators

| State                                            | LED Color                                                                           | Indications                                                                                                                                                                                                      |
|--------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Off                                              |  | The device is not charging. <ul style="list-style-type: none"> <li>• The device is not inserted correctly in the cradle or connected to a power source.</li> <li>• The charger/cradle is not powered.</li> </ul> |
| Slow Blinking Amber<br>(1 blink every 4 seconds) |  | The device is charging.                                                                                                                                                                                          |
| Slow Blinking Red<br>(1 blink every 4 seconds)   |  | The device is charging, but the battery is at the end of its useful life.                                                                                                                                        |
| Solid Green                                      |  | Charging is complete.                                                                                                                                                                                            |
| Solid Red                                        |  | Charging is complete, but the battery is at the end of its useful life.                                                                                                                                          |

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**Table 3** Charging/Notification LED Charging Indicators (Continued)

| State                                    | LED Color                                                                         | Indications                                                                                                                                                                                                                                                  |
|------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fast Blinking Amber<br>(2 blinks/second) |  | Charging error. For example: <ul style="list-style-type: none"> <li>• Temperature is too low or too high.</li> <li>• Charging has gone on too long without completion (typically 12 hours).</li> </ul>                                                       |
| Fast Blinking Red<br>(2 blinks/second)   |  | Charging error, and the battery is at the end of its useful life. For example: <ul style="list-style-type: none"> <li>• The temperature is too low or too high.</li> <li>• Charging has gone on too long without completion (typically 12 hours).</li> </ul> |

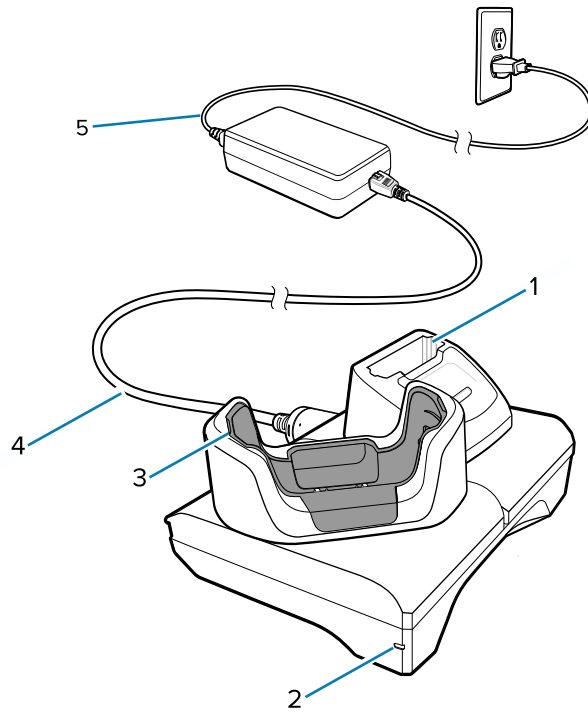
## Accessories for Charging

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

### Charging and Communication

| Description                            | Part Number        | Charging               |               | Communication |          |
|----------------------------------------|--------------------|------------------------|---------------|---------------|----------|
|                                        |                    | Battery<br>(In device) | Spare Battery | USB           | Ethernet |
| 1-Slot Charge Only Cradle              | CRD-NGTC5-2SC1B    | Yes                    | Yes           | No            | No       |
| 1-Slot USB/Ethernet Cradle             | CRD-NGTC5-2SE1B    | Yes                    | Yes           | Yes           | Yes      |
| 5-Slot Charge Only Cradle with Battery | CRD-NGTC5-5SC4B    | Yes                    | Yes           | No            | No       |
| 5-Slot Charge Only Cradle              | CRD-NGTC5-5SC5D    | Yes                    | No            | No            | No       |
| 5-Slot Ethernet Cradle                 | CRD-NGTC5-5SE5D    | Yes                    | No            | No            | Yes      |
| Charge/USB Cable                       | CBL-TC5X-USBC2A-01 | Yes                    | No            | Yes           | No       |

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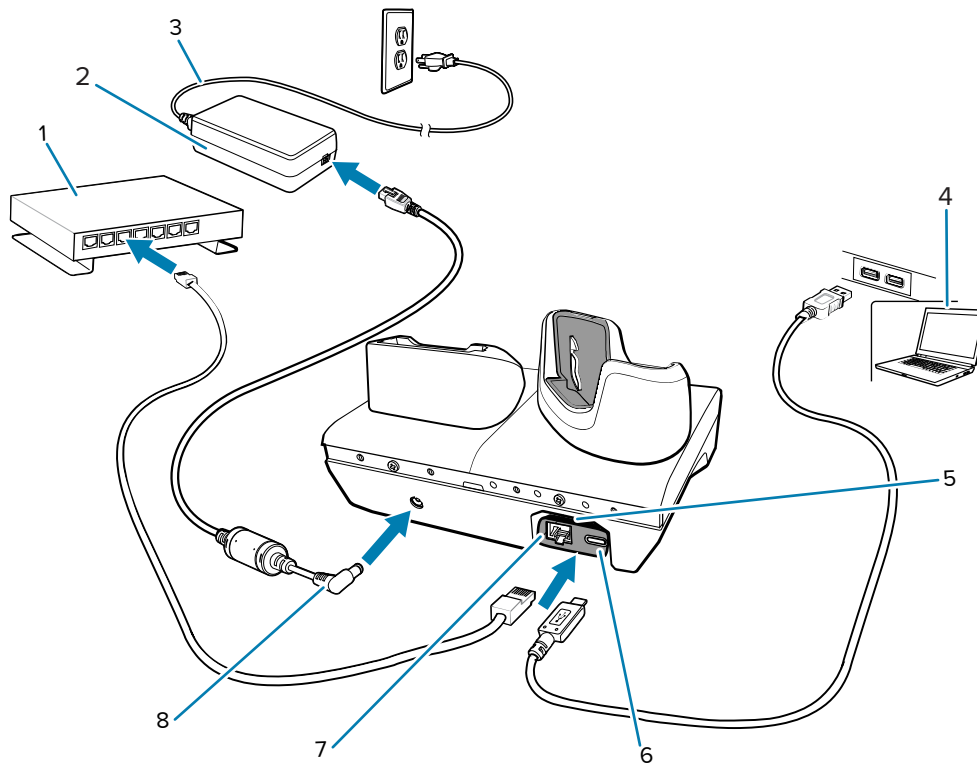
**1-Slot Charge Only Cradle**

|   |                                |
|---|--------------------------------|
| 1 | Spare battery charging slot    |
| 2 | Power LED                      |
| 3 | Device charging slot with shim |
| 4 | DC power supply                |
| 5 | AC line cord                   |

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**1-Slot Ethernet USB Charge Cradle**

Use a short description in a reference topic to briefly describe what the reference item does, what it is, or what it is used for.

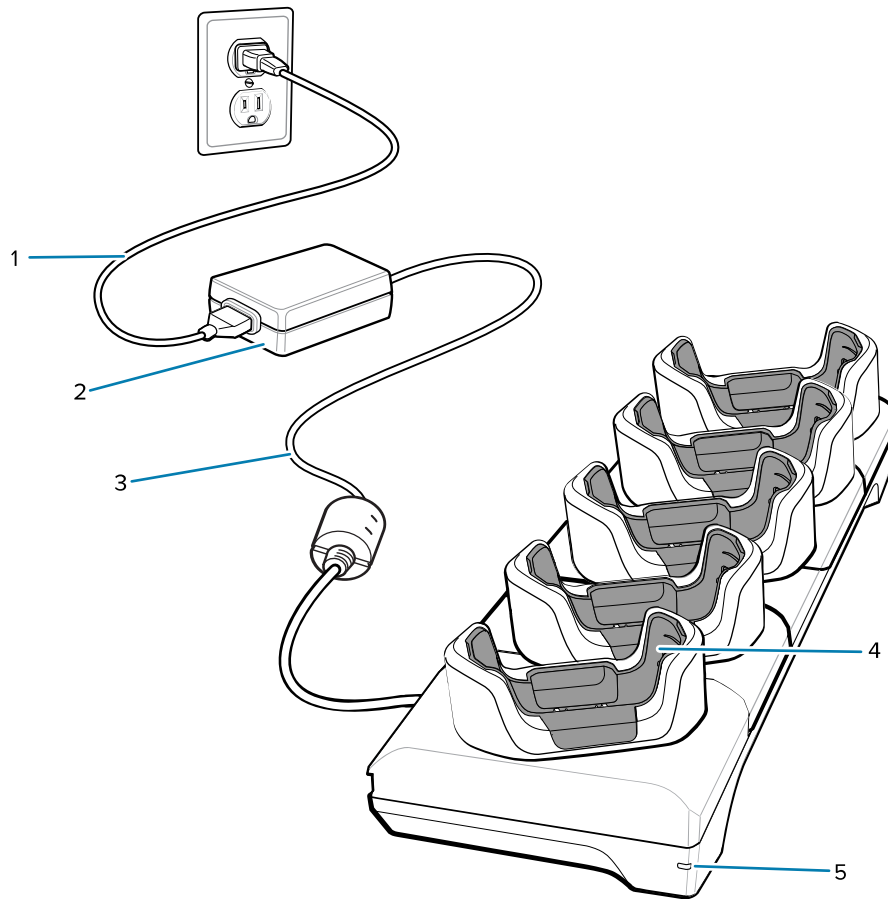


|   |                                               |
|---|-----------------------------------------------|
| 1 | Ethernet switch                               |
| 2 | Power Supply                                  |
| 3 | AC line cord                                  |
| 4 | Host computer                                 |
| 5 | USB to Ethernet module kit (sold separately)  |
| 6 | USB port (on USB to Ethernet module kit)      |
| 7 | Ethernet port (on USB to Ethernet module kit) |
| 8 | DC line cord                                  |



**NOTE:** The USB to Ethernet module kit (KT-TC51-ETH1-01) connects via a single-slot USB charger.

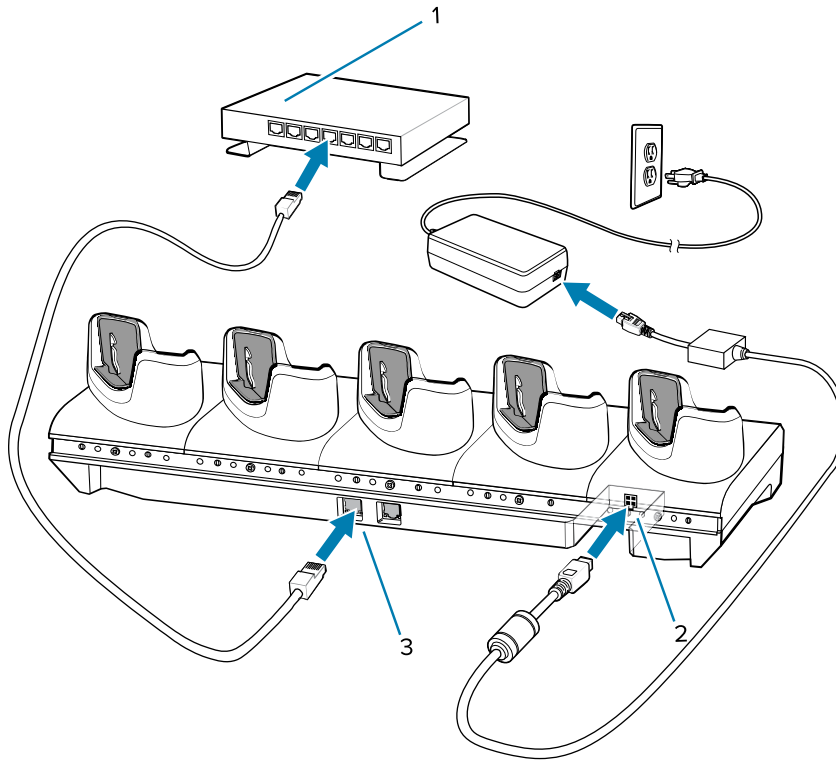
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**5-Slot Charge Only Cradle**

|   |                                |
|---|--------------------------------|
| 1 | AC line cord                   |
| 2 | DC power supply                |
| 3 | DC line cord                   |
| 4 | Device charging slot with shim |
| 5 | Power LED                      |

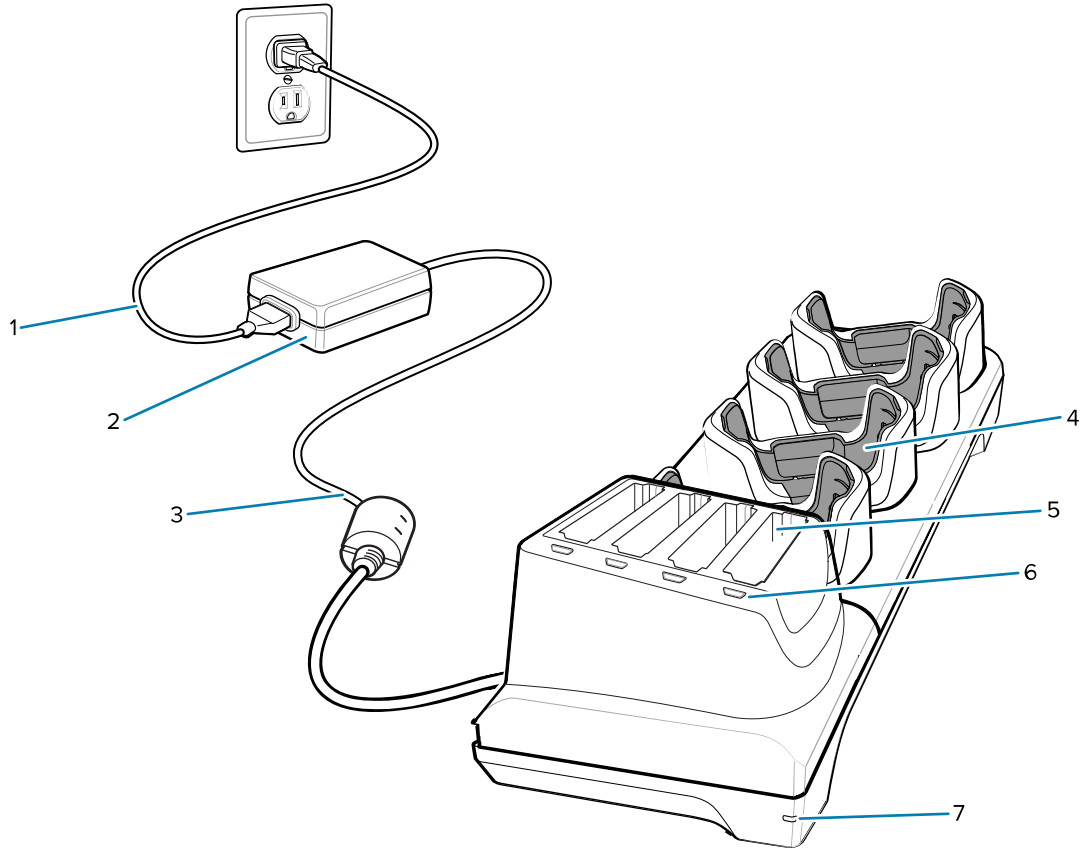
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## 5-Slot Ethernet Cradle Setup



|   |                 |
|---|-----------------|
| 1 | Ethernet switch |
| 2 | DC power supply |
| 3 | Ethernet port   |

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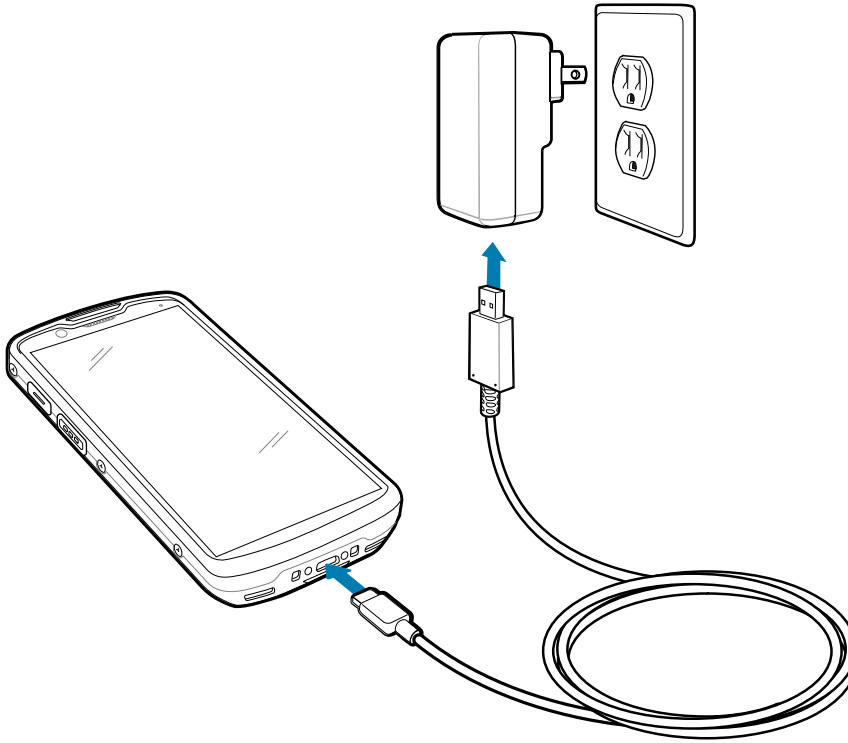
**5-Slot (4 Device/4 Spare Battery) Charge Only Cradle with Battery Charger**

|   |                                |
|---|--------------------------------|
| 1 | AC line cord                   |
| 2 | DC power supply                |
| 3 | DC line cord                   |
| 4 | Device charging slot with shim |
| 5 | Spare battery charging slot    |
| 6 | Spare battery charging LED     |
| 7 | Power LED                      |

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## Charge/USB-C Cable

The USB-C Cable snaps onto the bottom of the device and removes easily when not in use. When attached to the device, it provides charging and allows the device to transfer data to a host computer.



## Scanning with Internal Imager

Use the internal imager to capture barcode data.

To read a barcode or QR code, a scan-enabled application is required. The device contains the DataWedge Demonstration (DWDemo) app, which allows you to enable the imager, decode the barcode/QR code data, and display barcode content.

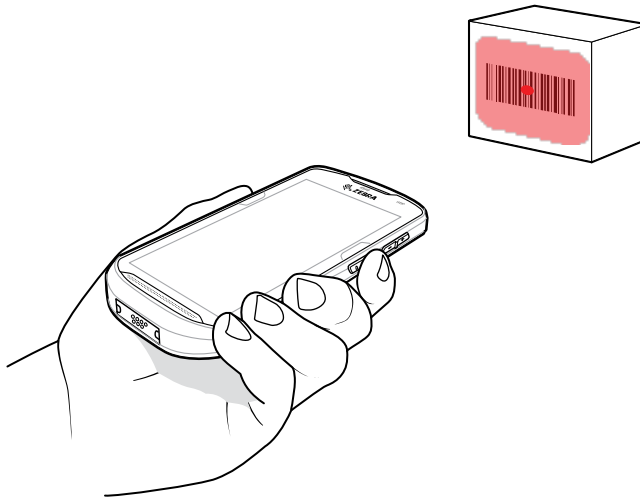


**NOTE:** The SE55 displays a green dash-dot-dash aimer. The SE4720 displays a red dot aimer.

1. Ensure that an application is open on the device and a text field is in focus (text cursor in text field).

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2. Point the exit window on the top of the device at a barcode or QR code.



3. Press and hold the scan button.  
The device projects the aiming pattern.

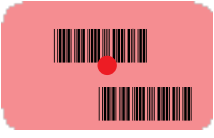
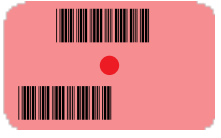
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4. Ensure the barcode or QR code is within the area formed in the aiming pattern.

**Table 4** Aiming Patterns

| SE55                                                                                                                                                                                                                                                                                                                                                      | SE4720                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     <p>✓</p> <p>✗</p> |     <p>✓</p> <p>✗</p> |

**Table 5** Aiming Patterns in Picklist Mode with Multiple Barcodes

| SE55                                                                                                                                                                                    | SE4720                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   <p>✓</p> <p>✗</p> |   <p>✓</p> <p>✗</p> |



**NOTE:** When the device is in Picklist mode, it does not decode the barcode/QR code until the center of the crosshair touches the barcode/QR code.

The Data Capture LED light turns green, and the device beeps, by default, to indicate that the barcode or QR code was decoded successfully.

5. Release the scan button.

The device displays the barcode or QR code data in the text field.

## Ergonomic Considerations

