



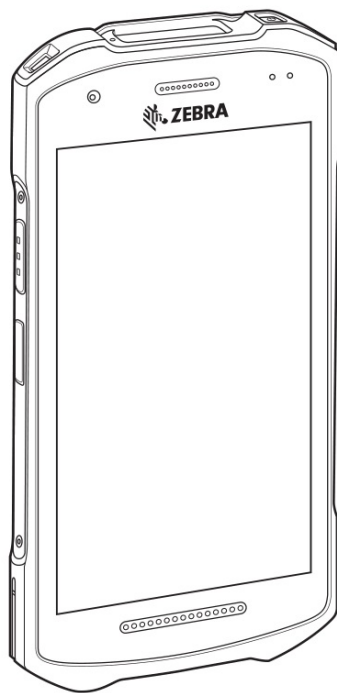
ZEBRA TC21 Handheld Touch Computer User Guide

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**ZEBRA TC21 Handheld Touch Computer
User Guide**

TC21

Touch Computer



Quick Start Guide



MN-003892-01EN

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Unpacking

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:
 - Touch computer
 - PowerPrecision 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. Prior to using the device for the first time, remove the protective shipping film that covers the scan window, display and camera window.

Features

Figure 1 Front View

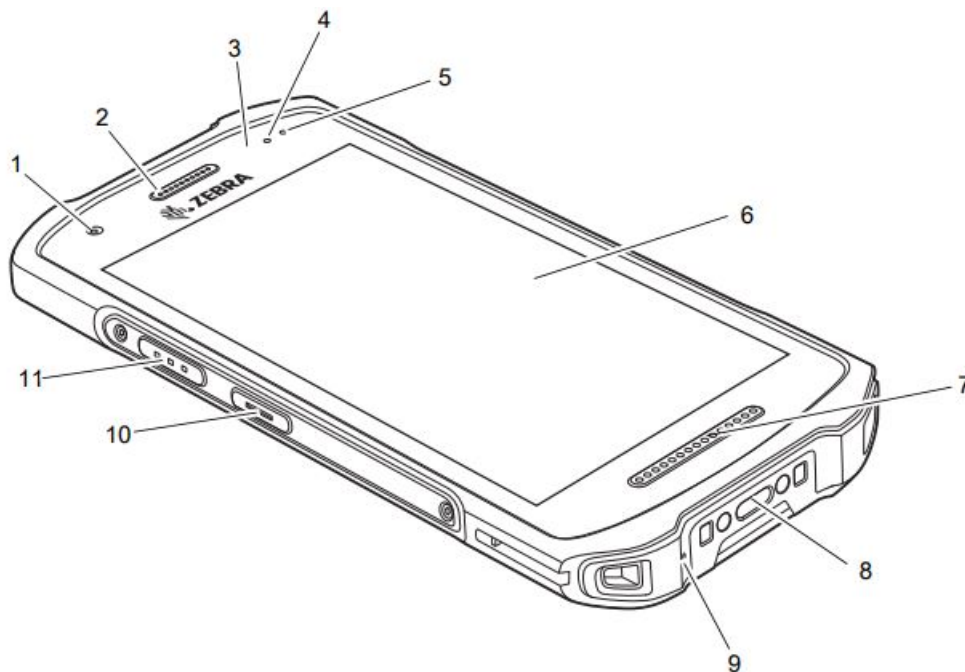


Table 1 Front View Features

Number	Item	Function
1	Front Camera	Takes photos and videos (available on some models).
2	Receiver	Use for audio playback in Handset mode.
3	Proximity/Light Sensor	Determines proximity for turning off display when in handset mode. Determines ambient light for controlling display backlight intensity.
4	Data Capture LED	Indicates data capture status.

Number	Item	Function
5	Charging/Notification LED	Indicates battery charging status while charging and application generated notifications.
6	Touch Screen	Displays all information needed to operate the device.
7	Speaker	Provides audio output for video and music playback. Provides audio in speakerphone mode.
8	USB-C Connector	Provides USB host and client communications, and device charging via cables and accessories.
9	Microphone	Use for communications in Handset mode.
10	PTT Button	Initiates push-to-talk communications (programmable).
11	Scan Button	Initiates data capture (programmable).

Figure 2 Rear View

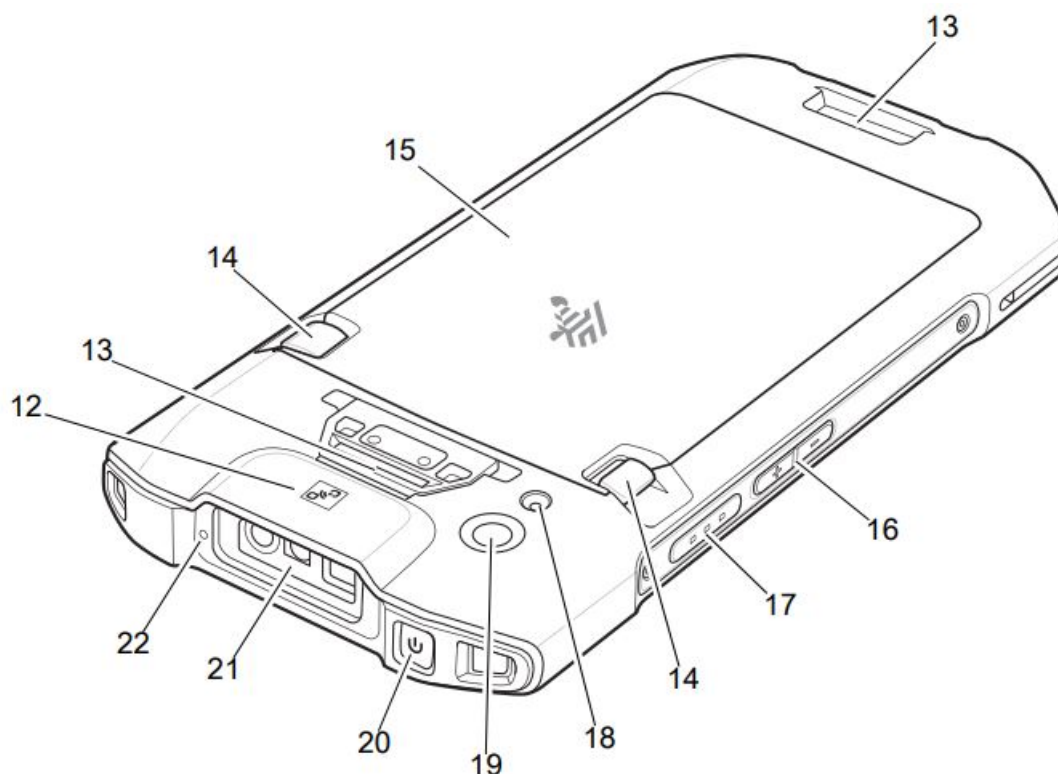


Table 2 Back View Features

Number	Item	Function
12	NFC Antenna	Provides communication with other NFC-enabled devices.
13	Basic Hand Strap Mount	Provides mounting point for Basic Hand Strap accessory.
14	Battery Release Latches	Press to remove the battery.

Number	Item	Function
15	Battery	Standard - 3,300 mAh (typical) / 3,100 mAh (minimum) PowerPrecision Lithium-ion Battery Extended - 5,400 mAh (typical) / 5,400 mAh (minimum), PowerPrecision Lithium-ion Battery.
16	Volume Up/Down Button	Increase and decrease audio volume (programmable).
17	Scan Button	Initiates data capture (programmable).
18	Camera Flash	Provides illumination for the camera.
19	Rear Camera	Takes photos and videos.
20	Power Button	Turns the display on and off. Press and hold to reset the device or power off.
21	Exit Window	Provides data capture using the imager.
22	Microphone	Use for communications in Speakerphone mode.

Setting Up the Device

To start using the device for the first time.

1. Install a micro secure digital (SD) card (optional).
2. Install hand strap (optional).
3. Install the battery.
4. Charge the device.
5. Power on the device.

Installing a microSD Card

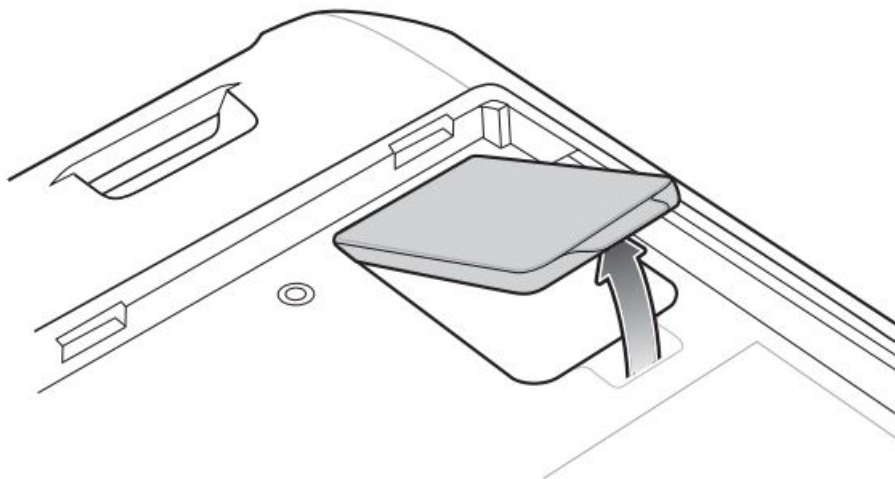
The microSD card slot provides secondary non-volatile storage. The slot is located under the battery pack. Refer to the documentation provided with the card for more information, and follow the manufacturer's recommendations for use.



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.

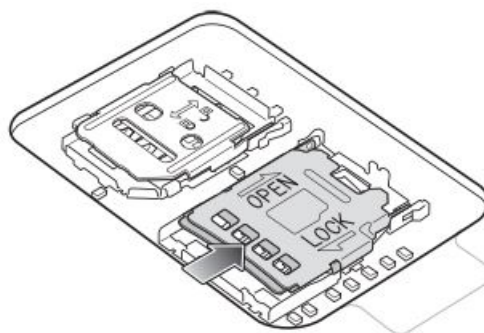
1. Lift the access door.

Figure 3 Lift Access Door



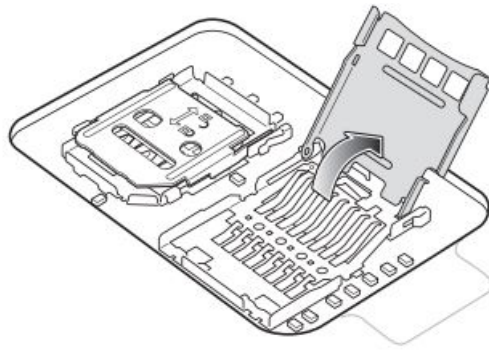
2. Slide the microSD card holder to the unlock position.

Figure 4 Unlock microSD Card Holder



3. Lift the microSD card holder.

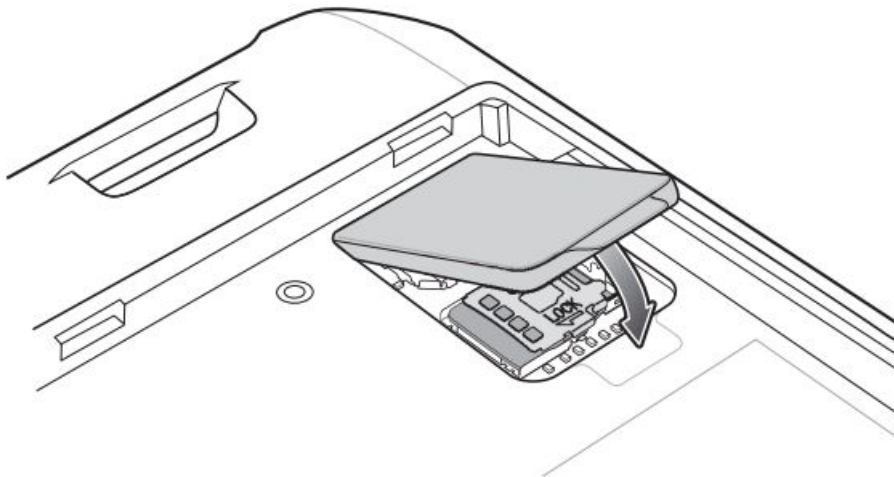
Figure 5 Lift the microSD Card Holder



CAUTION: Access door must be replaced and securely seated to ensure proper device sealing.

6. Re-install the access door.

Figure 8 Replace Access Door



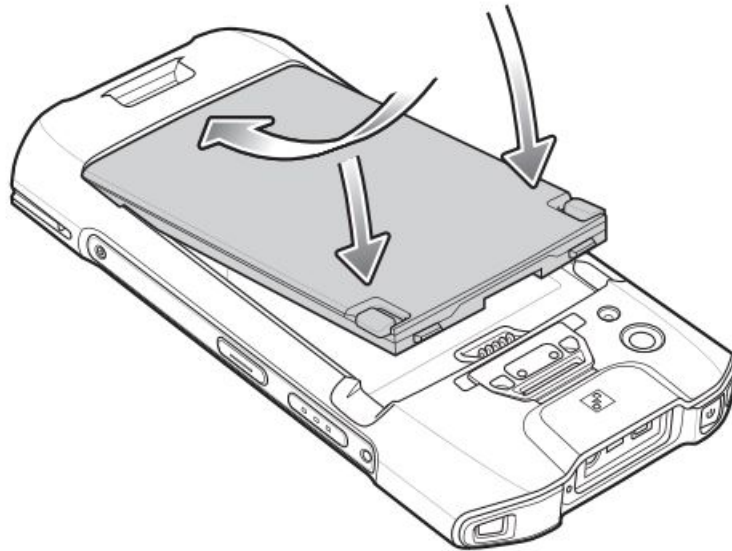
Installing the Battery



NOTE: User modification of the device, particularly in the battery well, such as labels, asset tags, engravings, stickers, etc., 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 effected. 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.

Figure 9 Insert Bottom of Battery into Battery Compartment



2. Press the battery down into the battery compartment until the battery release latches snap into place.

Charging the Device



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

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

Table 3 Accessories

Accessory	Part Number	Description
1-Slot Charge Only Cradle	CRD-TC2Y-BS1CO-01	Provides device charging only. Requires USB-C cable (CBL-TC5X-USBC2A-01) and power supply (PWR-WUA5V12W0xx).
1-Slot USB/Ethernet Cradle	CRD-TC2Y-SE1ET-01	Provides device charging and communication, and charging for Extended Power Pack. Requires power supply (PWR-BGA12V50W0WW), DC line cord (CBL-DC-388A1-01), and country-specific AC line cord.
4-Slot Charge Only Cradle with Battery Charger Kit	CRD-TC2Y-BS54B-01	Charges up to four devices and four spare batteries. Requires power supply (PWR-BGA12V108W0WW), DC line cord (CBL-DC-381A1-01), and country-specific AC line cord.
5-Slot Charge Only Cradle	CRD-TC2Y-BS5CO-01	Charges up to five devices. Charges up to four devices and four spare batteries. Requires power supply (PWR-BGA12V108W0WW), DC line cord (CBL-DC-381A1-01), and country-specific AC line cord.
5-Slot Ethernet Cradle	CRD-TC2Y-SE5ET-01	Provides device charging and provides Ethernet communication for up to five devices. Requires power supply (PWR-BGA12V108W0WW), DC line cord (CBL-DC-381A1-01), and country-specific AC line cord.
4-Slot Battery Charger	SAC-TC2Y-4SCHG-01	Charges up to four battery packs. Requires power supply (PWR-BGA12V50W0WW), DC line cord (CBL-DC-388A1-01), and country-specific AC line cord.
Cigarette Light Adapter Auto Charge Cable	CHG-AUTO-USB1-01	Provides power to the device from a cigarette lighter socket. Requires USB-C cable (CBL-TC5X-USBC2A-01).
USB-C Communication and Charge Cable	CBL-TC5X-USBC2A-01	Provides UBC-A to USB-C communication and power to the device.
Micro USB Communication Cable	25-124330-01R	Provides USB communication for the 1-Slot USB/Ethernet Cradle and the USB/Ethernet Module.

Main Battery Charging

To charge a device:

1. Insert the device into a slot to begin charging.
2. Ensure the device is seated properly.

The device's Charging/Notification LED indicates the status of the battery charging in the device. The 3,220 mAh (typical) standard battery charges from fully depleted to 90% in approximately 2.5 hours and from fully depleted to 100% in approximately three hours. The 5,260 mAh (typical) extended battery charges from fully depleted to 90% in approximately four hours and from fully depleted to 100% in approximately five hours.



NOTE: In many cases the 90% charge provides plenty of charge for daily use.

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

Table 4 Charging/Notification LED Charging Indicators

State	Indication
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 (1 blink every 4 seconds)	Device is charging.
Slow Blinking Red (1 blink every 4 seconds)	Device is charging but the battery is at end of useful life.
Solid Green	Charging complete.
Solid Red	Charging complete but the battery is at end of useful life.
Fast Blinking Amber (2 blinks/second)	Charging error, for example: <ul style="list-style-type: none">• Temperature is too low or too high.• Charging has gone on too long without completion (typically eight hours).
Fast Blinking Red (2 blinks/second)	Charging error but the battery is at end of useful life., for example: <ul style="list-style-type: none">• Temperature is too low or too high.• Charging has gone on too long without completion (typically eight hours).

Spare Battery Charging

To charge a spare battery:

1. Insert the battery into a battery charging well.
2. Gently press down on the battery to ensure proper contact.

The Spare Battery Charging LED on the cup indicates the status of the spare battery charging. The 3,220 mAh (typical) standard battery charges from fully depleted to 90% in approximately 2.5 hours and from fully depleted to 100% in approximately three hours. The 5,260 mAh (typical) extended battery charges from fully depleted to 90% in approximately four hours and from fully depleted to 100% in approximately five hours.



NOTE: In many cases the 90% charge provides plenty of charge for daily use.

To achieve the best fast charging results use only Zebra charging accessories and batteries.

Table 5 Spare Battery LED Charging Indicators

LED	Indication
Solid Amber	Spare battery is charging.
Solid Green	Spare battery charging is complete.
Solid Red	Spare battery is charging and battery is at the end of useful life. Charging complete and battery is at the end of useful life.
Fast Blinking Red (2 blinks/second)	Error in charging; check placement of spare battery and battery is at the end of useful life.
Off	No spare battery in slot. Spare battery not placed in slot correctly. Cradle is not powered.

Charging Temperature

Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). The device or cradle always performs battery charging in a safe and intelligent manner. At higher temperatures (for example: approximately +37°C (+98°F)) the device or cradle may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The device and cradle indicates when charging is disabled due to abnormal temperatures via its LED.

1-Slot Charge Only Cradle

Figure 10 1–Slot Charge Only Cradle

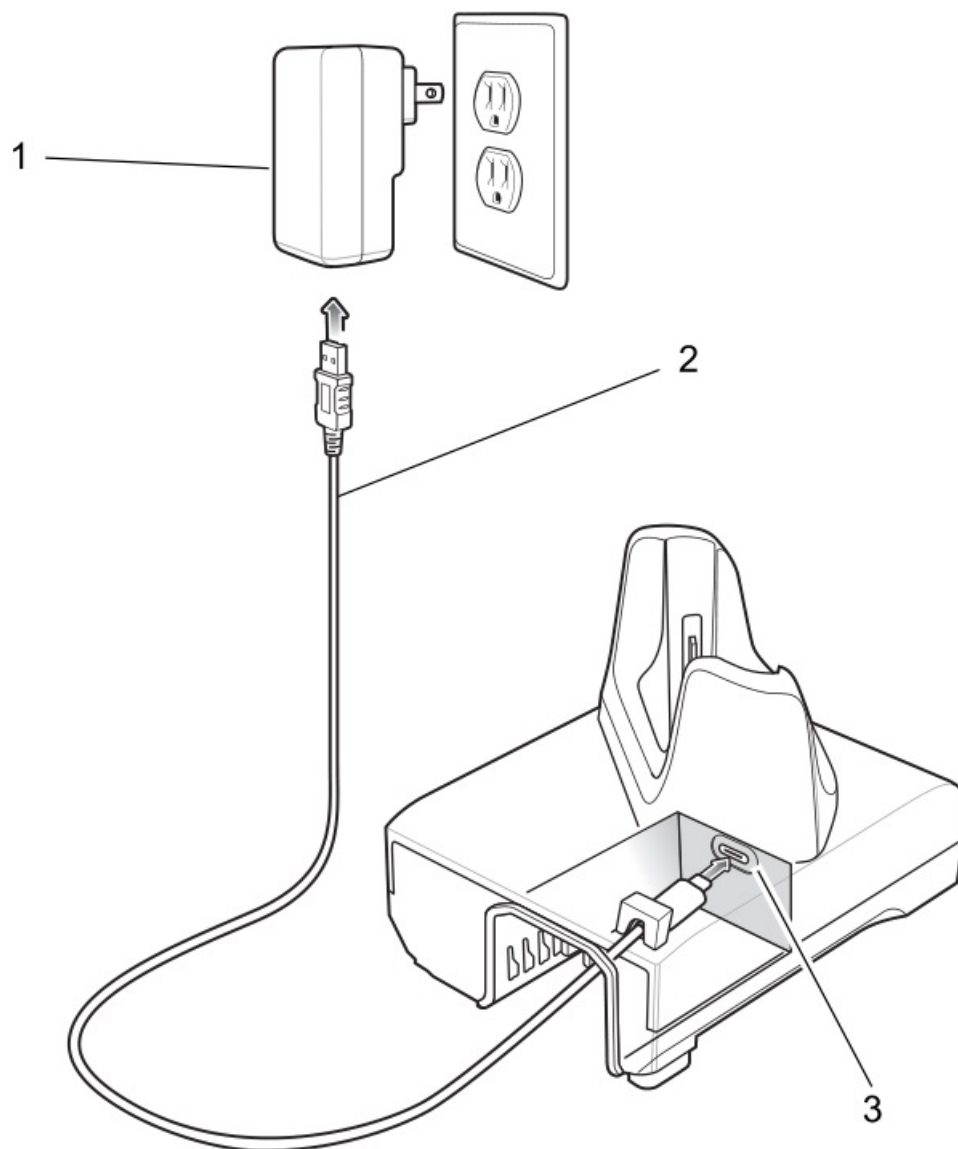


Table 6 1-Slot Charge Only Cradle Features

Number	Item
1	Power Supply
2	USB-C Cable
3	USB-C Port

1-Slot USB/Ethernet Cradle

Figure 11 1-Slot USB/Ethernet Cradle Setup

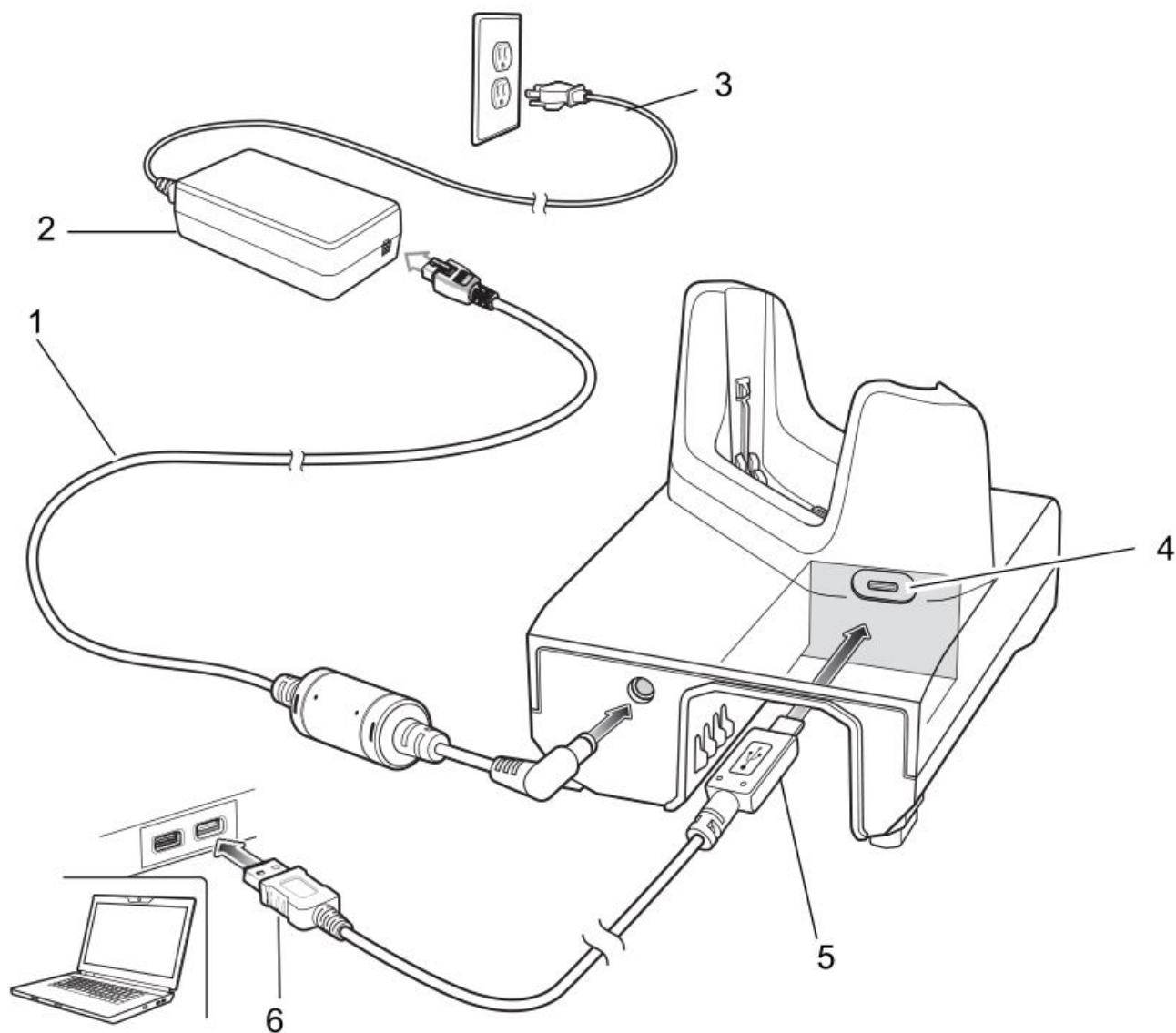


Table 7 1-Slot USB/Ethernet Cradle Features

Number	Item
1	DC Line Cord
2	Power Supply
3	AC Line Cord
4	USB micro-AB Port
5	USB micro-B Connector
6	USB-A Connector

4-Slot Charge Only Cradle with Battery Charger

Figure 12 4-Slot Charge Only Cradle with Battery Charger

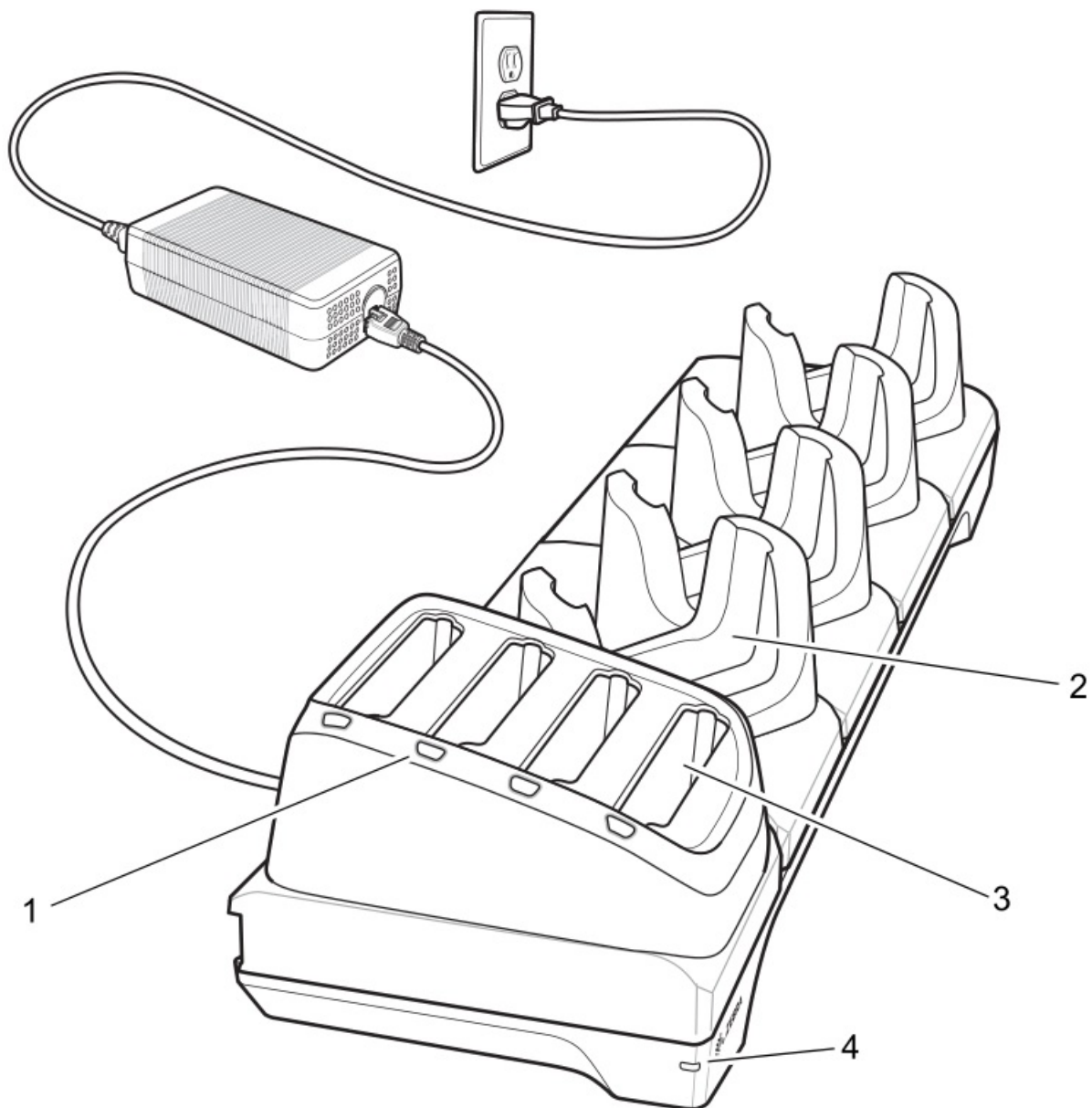


Table 8 4-Slot Charge Only Cradle with Battery Charger Features

Number	Item
1	Spare Battery Charging LED
2	Device Charging Slot
3	Spare Battery Slot
4	Power LED

5-Slot Charge Only Cradle

Figure 13 5-Slot Charge Only Cradle

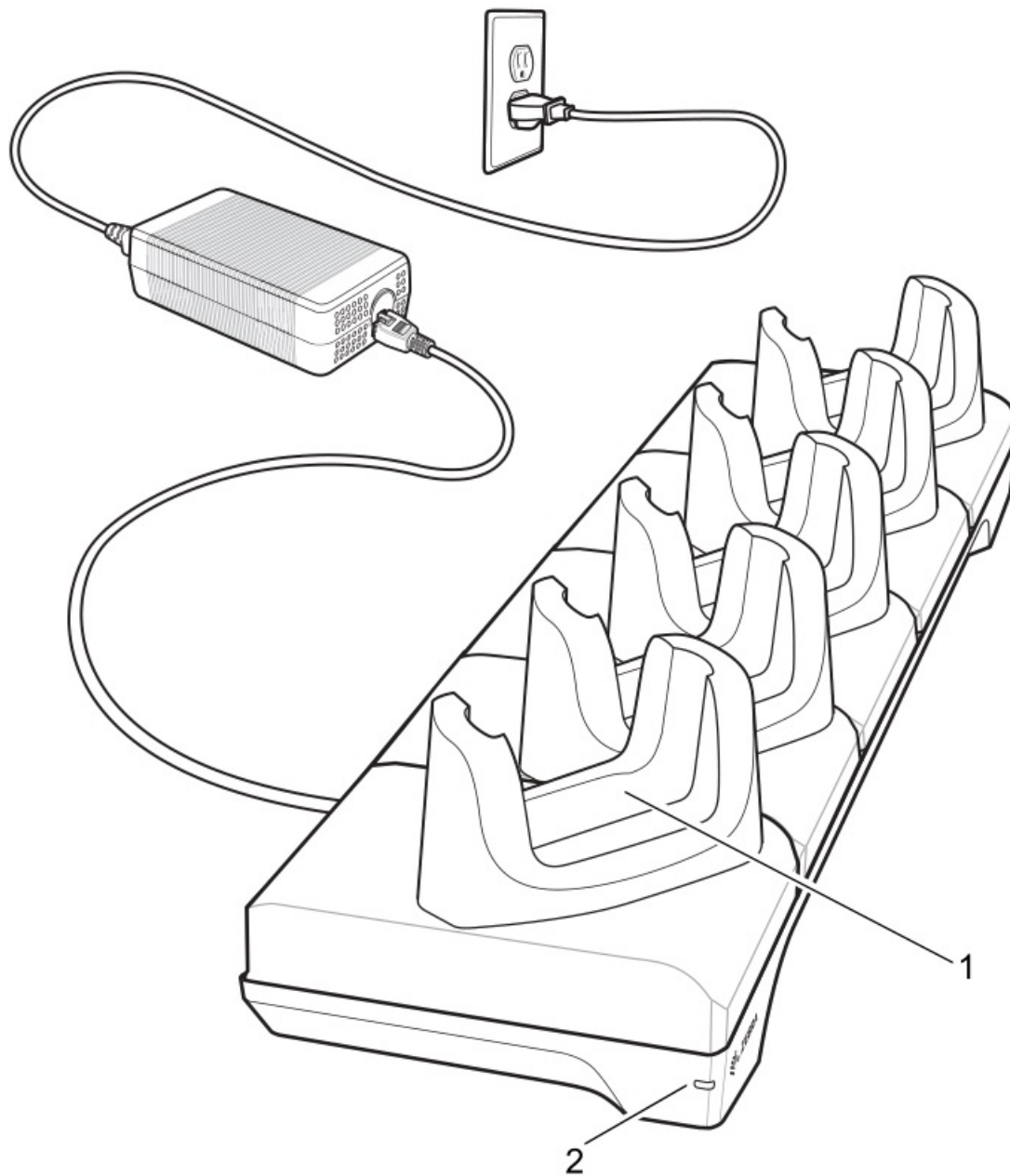


Table 9 5-Slot Charge Only Cradle Features

Number	Item
1	Device Charging Slot
2	Power LED

5-Slot Ethernet Cradle

Figure 14 5-Slot Ethernet Cradle

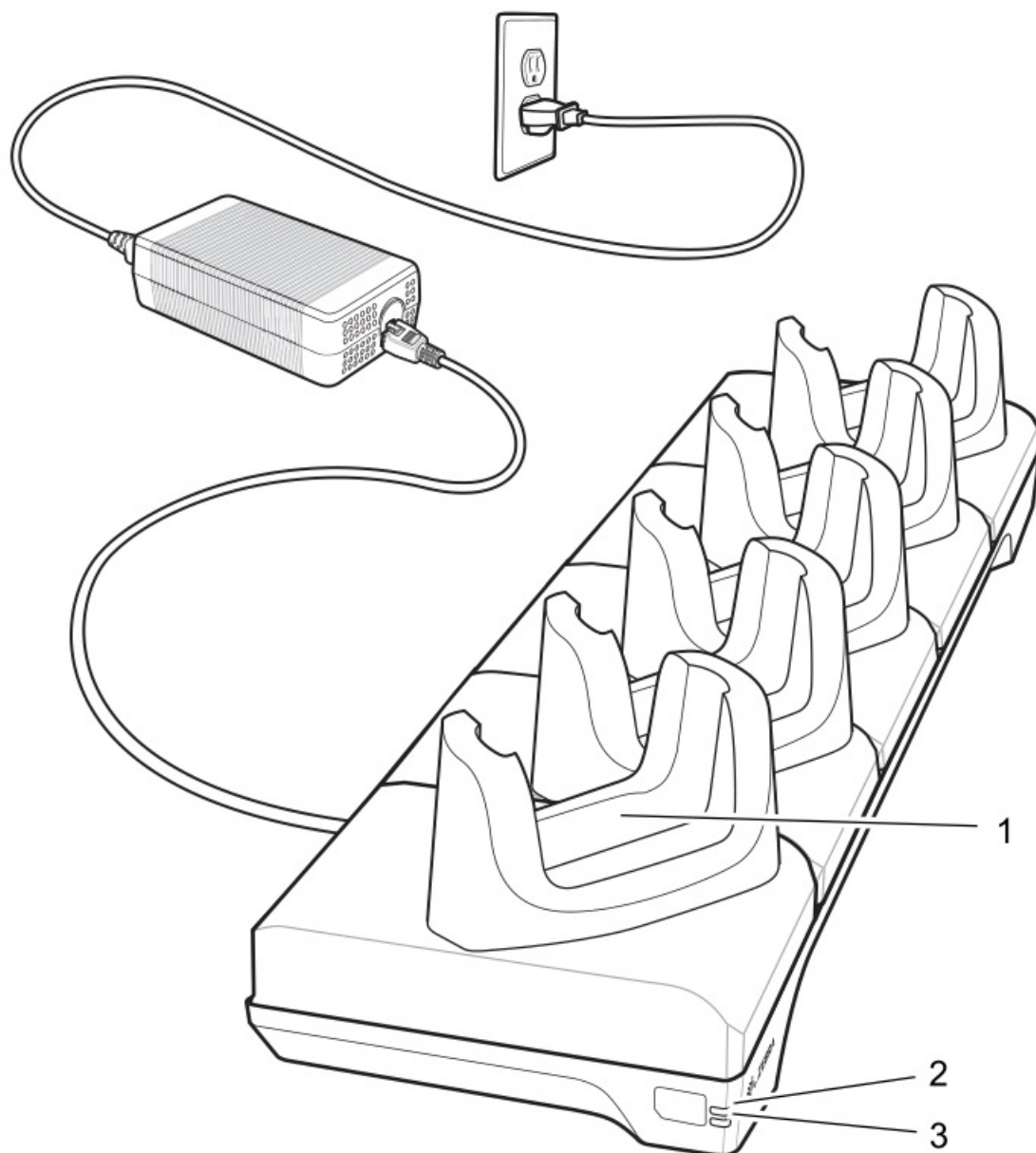


Table 10 5-Slot Ethernet Cradle Features

Number	Item
1	Device Charging Slot
2	1000 LED
3	100/100 LED

4-Slot Battery Charger

Figure 15 4-Slot Battery Charger

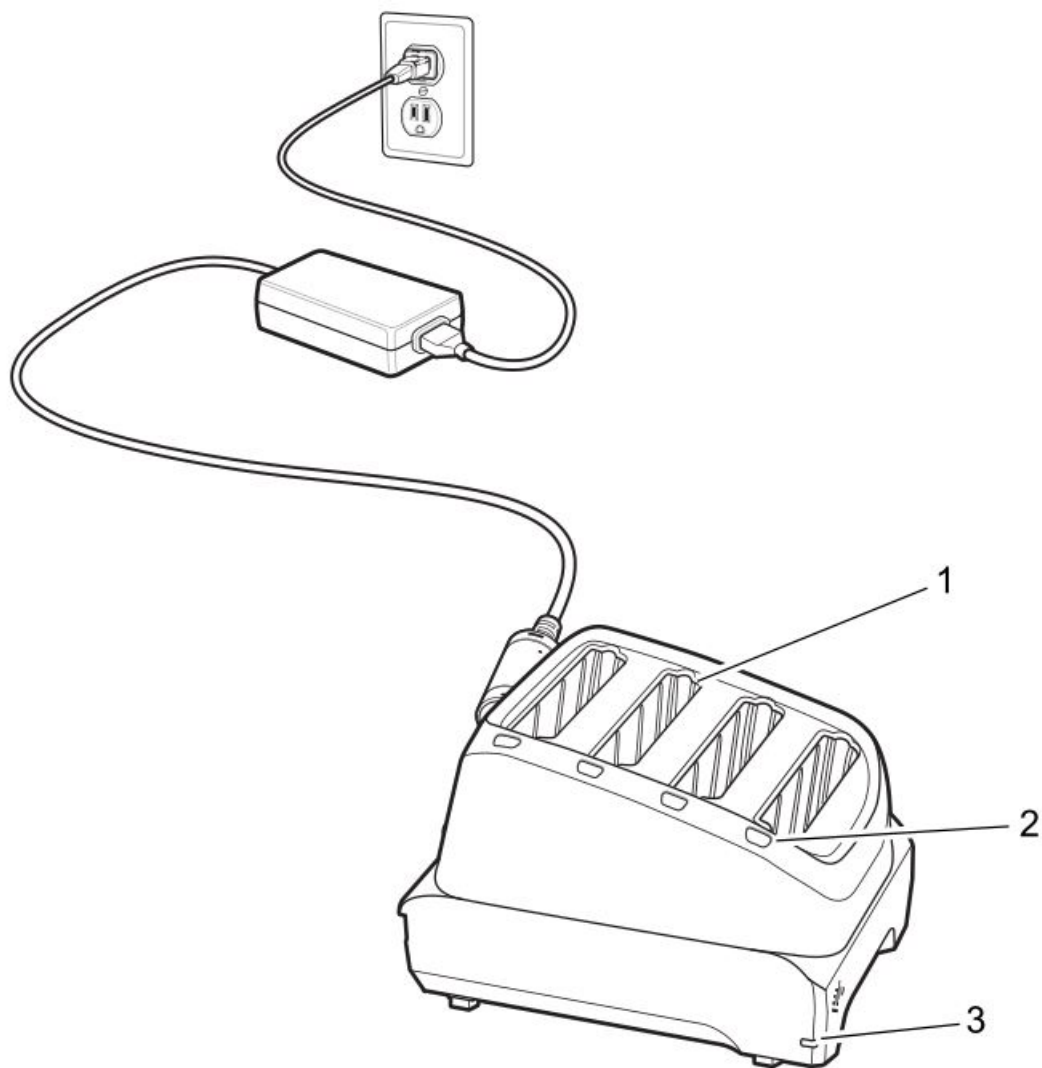


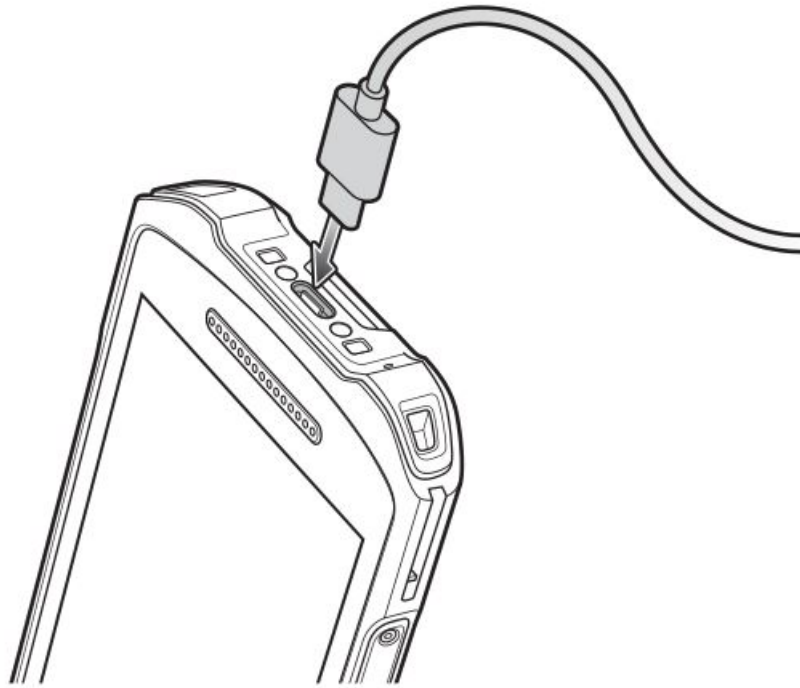
Table 11 4-Slot Battery Charger Features

Number	Item
1	Battery Slot
2	Battery Charging LED
3	Power LED

USB cable

The USB cable plugs into the bottom of the device. When attached to the device the cable allows charging, transferring data to a host computer, and connecting USB peripherals.

Figure 16 USB cable



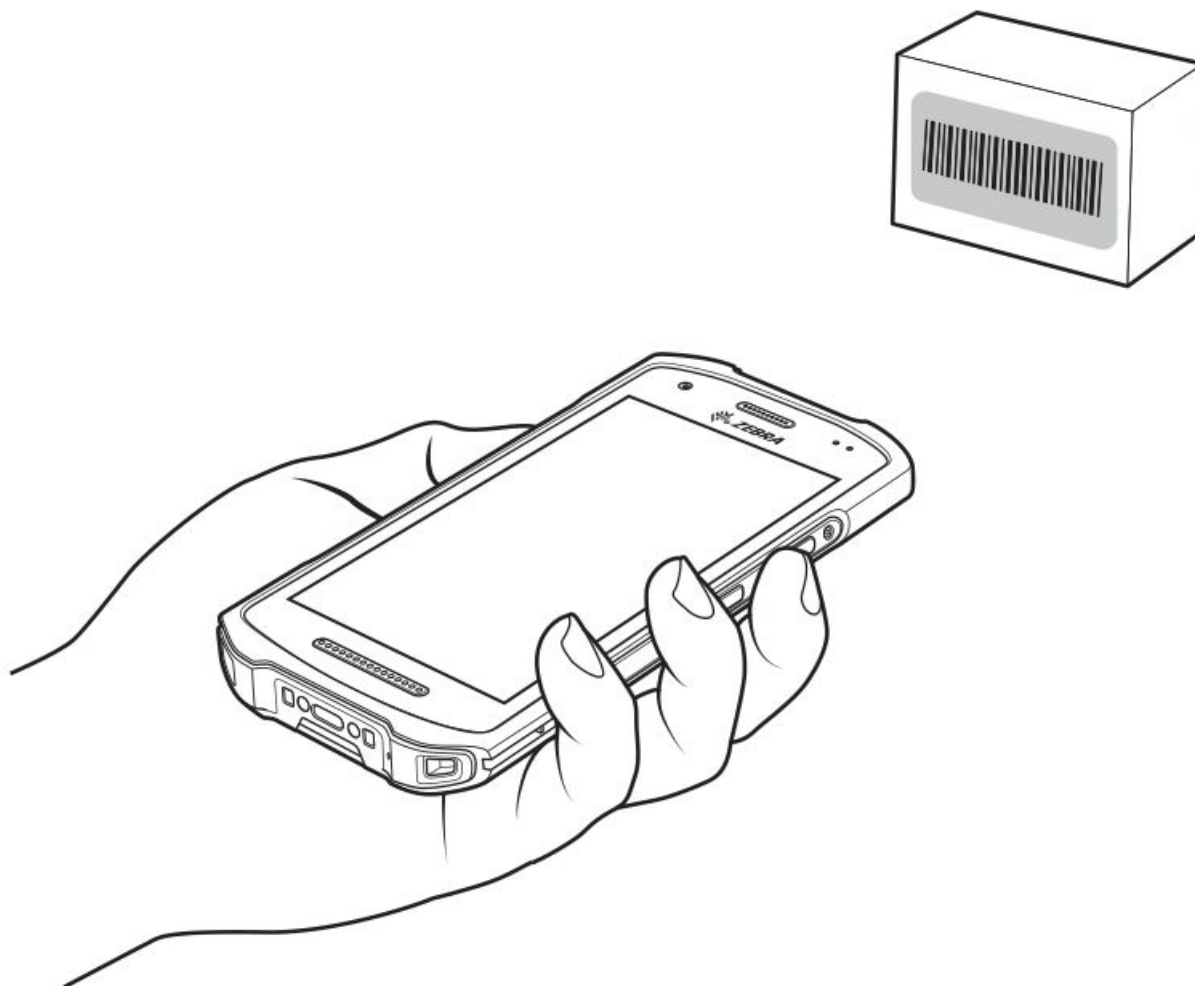
Scanning with Internal Imager

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

To scan with the internal imager:

1. Ensure that an app 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.

Figure 17 Imager Scanning



3. Press and hold the scan button.
The red laser aiming pattern turns on to assist in aiming.



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 by the crosshairs in the aiming pattern. The aiming dot increases visibility in bright lighting conditions.

Figure 18 Aiming Pattern

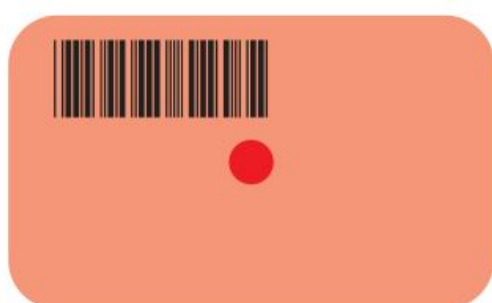
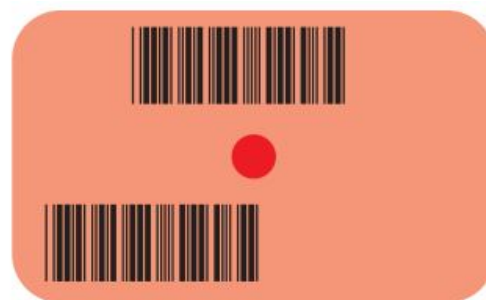


Figure 19 Pick List Mode with Multiple Barcodes



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.



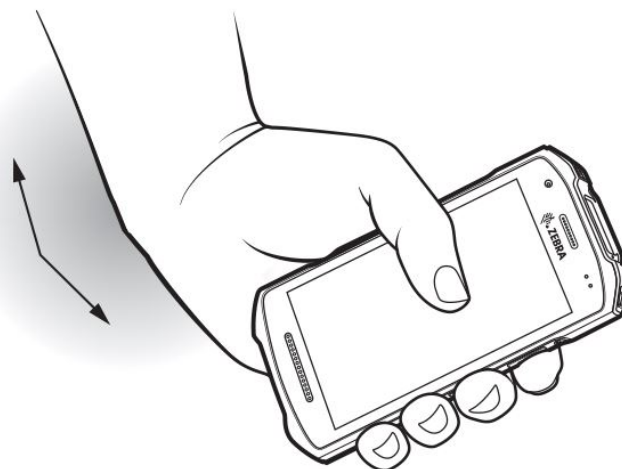
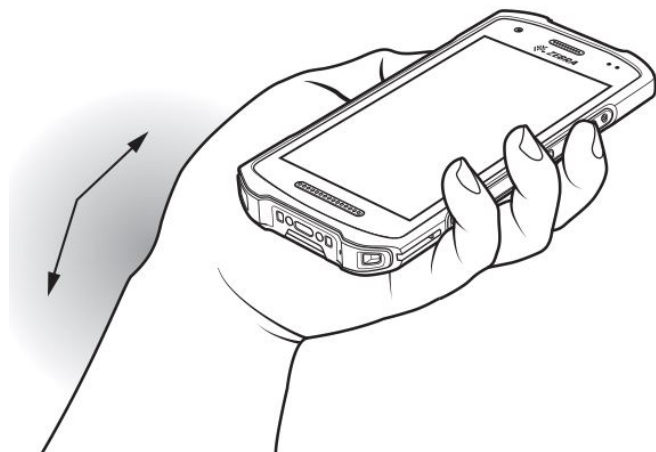
NOTE: Imager decoding usually occurs instantaneously. The device repeats the steps required to take a digital picture (image) of a poor or difficult barcode as long as the scan button remains pressed.

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

Ergonomic Considerations



CAUTION: Avoid extreme wrist angles.




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