

## RFD40 Premium/Premium Plus Sleds

Faster. Smarter. Future-proof.

Your business is being challenged to work faster and more efficiently than ever before. Gain the edge and efficiency you need with the RFD40 UHF RFID Premium and Premium Plus Sled. Connect to current and future Zebra mobile computers directly through eConnex™ adaptors, or wirelessly with Bluetooth® 5.3 capability. Industry-first Wi-Fi™ 6 enables easy over-the-air (OTA) device management.\* Decrease cycle-counting time with an industry-best 1,300+ tag reads per second, optimized read range, tri-function programmable trigger and increased battery capacity, along with the durable drop specs, optimal battery performance and superior ergonomic design you expect from Zebra.



### Empower Your Workers

#### Next Generation Connectivity

With the new eConnex™ technology that allows for snap-and-go pairing, you can future-proof your workplace with a sled that supports the latest Zebra mobile computers including WWAN-enabled variants. What's more, the sleds can connect instantly to supported Zebra eConnex™-enabled devices including the TC21/26, EC50/55 and future models.

#### Wireless Functionality

Integrated Wi-Fi 6 capability in the RFD40 Premium and Premium Plus Sleds allows for easy over-the-air (OTA) device management, while Bluetooth 5.3 and NFC tap-to-pair make it easier than ever to connect to current and future Zebra mobile computers and third-party smartphones.

#### Integrated Barcode Scanner

Available only in the RFD40 Premium Plus Sled, an integrated SE4100 imager provides 1D and 2D scanning functionality for the most challenging barcodes—including poorly printed, damaged, dirty, crinkled, low-contrast, glossy and electronic barcodes on dimly lit mobile phone displays.

#### Unparalleled Efficiency

The RFD40 UHF RFID Premium and Premium Plus Sleds outperform the competition with 1,300+ tag reads per second (up to 30% faster than the next leading competitor), a 20+ foot read range, and ultra-accurate item-finder mode. With a 7,000 mAh battery and a quick-release function that's accessible without removing the mobile computer, it keeps going hour after hour. The tri-function trigger lets associates quickly access RFID reading, barcode scanning and a programmable third function of your choice, such as the enter key or push-to-talk.

#### Remarkable Versatility

An adaptor compatible with the OtterBox uniVERSE ecosystem allows customers to easily slide on and slide off a wide variety of smartphones running Android™ and iOS operating systems.



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**Find out more about how the RFD40 UHF RFID Premium and Premium Plus Sleds can optimize performance and boost your ROI.**

Please visit [www.zebra.com/rfd40](http://www.zebra.com/rfd40)

### **Adaptive Solutions**

RFD40 Premium and Premium Plus Sleds are fully enabled to support Zebra's current mobile computers and smartphones, as well as new mobile computers and third-party smartphones as they come out. Easy-to-change, tool-free sled adaptors allow associates to swap out an adaptor quickly while maintaining compatibility without needing to send devices to IT for retrofitting.

### **Durability You Can Depend On**

Zebra devices have the ability to withstand everyday environments. RFD40 Sleds have a five-foot drop-to-concrete specification and a 500 cycle 0.5 meter/1.6 foot tumble specification to replicate real-world knocks and bumps. They have IP54 sealing for dust and water protection, and an extended operating temperature range of -10°C to 50°C/14°F to 122°F. With these durable specifications, you can feel confident that RFD40 Sleds will meet the demanding needs of your workplace.

### **Flexible and Future-Proof Charging**

Charging solutions for RFD40 Sleds provide users a flexible way to power up the sled and mobile computer in a variety of ways. Featuring two sets of charging pins, each cradle cup can charge an RFD40 Sled by itself, the mobile computer by itself, or a combination of RFD40 Sled and mobile computer when attached together. Cradle cups are available for each combination of RFD40 Sled and mobile computer, including TC21/26 and EC50/55.

A USB-C port on the bottom of the RFD40 Sled, as well as a pinned connector, allows for connecting an RFD40 Sled to a Windows-based PC or other host via a USB-C cable or cable cup, which enables an RFD40 Sled to be used as a tethered RFID reader.

### **World-Class Development and Enablement Tools**

Quickly transition to the latest generation of products without the need for a major application rewrite. The Software Development Kits (SDKs) for RFD40 Premium and Premium Plus Sleds are based on current Zebra RFID handheld SDKs. Only a recompile of the current application with the new SDK is required for you to get up and running on the new RFD40 Sleds.

The RFD40 Premium and Premium Plus Sleds can now connect to 123RFID Desktop via USB cable, cable cup or Bluetooth, so you can configure your sleds live and offline. Use 123RFID Desktop for proofs-of-concept, demos and performing firmware upgrades.

### **No Host? No Problem!**

If a real-time connection to back-end systems is not available, batch mode enables the collection of up to 40,000 RFID tags. Just sync to upload data from RFD40 Sleds to the host device at any time.

### **Innovative New Cradle Solutions**

When you're ready to upgrade, Zebra's game-changing cradles were developed so mobile computers can be swapped out with ease. Using just a coin screw, you can make changes without tools or the hassle of plugging or unplugging any wire harnesses, simplifying the experience for all users.

Cradles that support RFD40 Premium and Premium Plus Sleds come in both one-slot and multi-slot options, as well as charge-only and communication variants. For communication support, the one-slot communication cradles have a Micro-USB port for connection to a host PC, while the multi-slot cradles possess an Ethernet port for connection to a corporate network. This connectivity allows you to manage your RFD40 Sleds while in the cradle and also provides the ability to set configuration, push out firmware upgrades, and get device health info, so you get more information about your device with less effort.

### **Secure Battery Locking Foot**

RFD40 Sleds have an optional Battery Locking Foot that locks the battery in place, helping to prevent user damage and/or theft.

### **Why Zebra for RFID?**

The time to implement RFID is now. Rely on the industry's deepest, field-proven portfolio to drive full-scale transformation without the risks. Designed for your environment, application and conditions, Zebra RFID solutions are engineered to make you more effective.



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# Specifications

## Physical Characteristics

|              |                                                                                                     |
|--------------|-----------------------------------------------------------------------------------------------------|
| Dimensions   | 5.94 in. H x 3.3 in. W x in. 6.5 in. L<br>15.1 cm H x 8.4 cm W x 16.65 cm L                         |
| Weight       | RFD40 Premium: ~19.1 oz./~541 grams (sled with battery)<br>RFD40 Premium Plus: ~19.6 oz./~556 grams |
| Power        | Quick-Release, PowerPrecision+ Li-Ion 7,000 mAh battery                                             |
| Notification | Decode LEDs<br>Battery Status LED<br>Beeper                                                         |
| User Input   | Tri-Function User Programmable Trigger                                                              |

## RFID Performance

|                                      |                                                                                                                                                                     |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards Supported                  | EPC Class 1 Gen 2; EPC Gen2 V2                                                                                                                                      |
| RFID Engine                          | Zebra Proprietary Radio Technology                                                                                                                                  |
| Fastest Read Rate                    | 1,300+ tags/sec                                                                                                                                                     |
| Nominal Read Range                   | ~19.7+ ft./ ~6+ m                                                                                                                                                   |
| Frequency Range and RF System Output | US: 902–928 MHz; 0–30 dBm (EIRP)<br>EU: 865–868 MHz; 0–30 dBm (EIRP)<br>916.3, 917.5, and 918.7 MHz; 0–30 dBm (EIRP)<br>Japan: 916–921 MHz (w LBT), 0–30 dBm (EIRP) |

## Wireless LAN

|                    |                                                                                                                                                                                                                                                                                        |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Radio              | IEEE 802.11 ax/ac/a/b/g/n 2X2, MU-MIMO, IPv4                                                                                                                                                                                                                                           |
| Data Rate          | 5 GHz PHY data rates up to 1.2 Gbps;<br>2.4 GHz PHY data rates up to 458 Mbps                                                                                                                                                                                                          |
| Operating Channels | Channel 1–14: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14;<br>Channel 36–196: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165, 172, 183, 184, 185, 187, 188, 189, 192, 196;<br>Channel Bandwidth: 20, 40, 80 MHz |

## SE4100 Imager (Premium Plus Only)

|                   |                                                                |
|-------------------|----------------------------------------------------------------|
| Sensor Resolution | 1280 x 960 pixels, rolling shutter                             |
| Field of View     | 44.5° horizontal, 33.5° vertical                               |
| Skew, Pitch, Roll | ±60° skew tolerance, ±60° pitch tolerance, 360° roll tolerance |
| Focal Distance    | 6 in./15.24 cm from front of engine                            |
| Aiming LED        | Green LED                                                      |
| Illumination      | Warm white LED                                                 |

## Accessories

|                      |                                                                                                                                                                                                                                         |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cradles and Charging | Cable Cup<br>USB-C Cable<br>USB Wall Brick for USB-C Cable and Cable Cup<br>1-Slot Charging Cradle<br>1-Slot Charging and USB Cradle<br>Multi-Slot Charging Cradle<br>Multi-Slot Charging and Ethernet Cradle<br>4-Slot Battery Toaster |
| Other Accessories    | eConnex™ Adaptors for Supported Zebra Mobile Computers<br>Battery Locking Foot<br>Belt Holster                                                                                                                                          |

## Communication

|                              |                                                                                              |
|------------------------------|----------------------------------------------------------------------------------------------|
| Host Connection              | eConnex™ (Electronic 8-Pin Connection)<br>Bluetooth 5.3<br>USB-C Cable<br>USB Cable Cup      |
| Host Computer                | Zebra mobile computers and tablets<br>3rd-party smartphones and tablets<br>Windows-Based PCs |
| Mobile Computer Adaptors     | eConnex™, Bluetooth, OtterBox uniVERSE Case System                                           |
| Bluetooth Profiles Supported | SPP Profile<br>HID Profile<br>Apple iAP2/MFi                                                 |
| Remote Management            | Wi-Fi 6<br>Ethernet Cradles<br>Via Attached Host Device                                      |

## Regulatory

|                    |                                                                                                                          |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|
| EMI/EMC            | FCC Part 15 Subpart B Class B; ICES 003 Class B;<br>EN 301 489-1; EN 301 489-3; EN 55035; EN 55032 Class B; EN 60601-1-2 |
| Electrical Safety  | IEC 62368-1 (ed.2)<br>UL 62368-1, second edition, CAN/CSA-C22.2 No. 62368-1-14                                           |
| RF Exposure        | EU: EN 50364, EN 62369-1, EN 50566, EN 62311;<br>USA: FCC Part 2. 1093 OET Bulletin 65 Supplement 'C'; Canada: RSS-102   |
| RFID               | EU EN 302 208, FCC Part 15 Subpart C; Canada: RSS-247                                                                    |
| LED Classification | (RFD40 Premium Plus) Exempt Risk Group<br>LED product per IEC/EN 62471                                                   |

## Footnotes

\* Some features available in a future release. Contact your Zebra Partner or sales representative for more information.

# Markets and Applications

## Retail

- Cycle Counting
- Item Finding
- Planogram Compliance
- Returns
- Inventory Management
- Warehouse Management
- Back-of-Store Management
- BOPIS/BOPAC
- Direct Store Delivery
- Route Accounting

## Hospitality

- Check-in and Administration
- Ticketing: Concerts, Sporting Events and More
- Loyalty Cards
- Food Safety and Traceability
- Inventory Management
- Field Service

## Healthcare

- Specimen Tracking
- Patient Tracking
- Hospital Asset Management and Tracking
- Staff Management and Tracking
- Patient Identification and Admission
- Medication Administration
- Pharmacy Management and Tracking



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# User Environment

|                         |                                                                              |
|-------------------------|------------------------------------------------------------------------------|
| Drop Specification      | Multiple 5 ft./1.5 m drops to concrete                                       |
| Tumble Specification    | 500 cycles (1,000 drops, 1.6 ft./0.5 m) at room temperature                  |
| Operating Temperature   | -10°C to 50°C/14°F to 122°F                                                  |
| Storage Temperature     | -40°C to 70°C/-40°F to 158°F                                                 |
| Humidity                | 5–85% non-condensing                                                         |
| Electrostatic Discharge | ±15 kV air discharge<br>±8 kV direct discharge<br>±8 kVdc indirect discharge |
| Sealing                 | IP54                                                                         |



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