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.

Find out more about how the RFD40 UHF RFID Premium and Premium Plus Sleds can optimize performance and boost your ROI.
For more information, please visit 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 m/1.6 ft. 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.

Specifications

Physical Characteristics	
Dimensions	5.94 in. H x 3.3 in. W x in. 6.5 in. L 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) **RFD40 Premium Plus:** ~19.6 oz./~556 grams
Power	Quick-Release, PowerPrecision+ Li-Ion 7,000 mAh battery
Notification	Decode LEDs Battery Status LED 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) EU: 865–868 MHz; 0–30 dBm (EIRP) 916.3, 917.5, and 918.7 MHz; 0–30 dBm (EIRP) 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; 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; 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; 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
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 ±8 kV direct discharge ±8 kVdc indirect discharge
Sealing	IP54
Accessories	
Cradles and Charging	Cable Cup USB-C Cable USB Wall Brick for USB-C Cable and Cable Cup 1-Slot Charging Cradle 1-Slot Charging and USB Cradle Multi-Slot Charging Cradle Multi-Slot Charging and Ethernet Cradle 4-Slot Battery Toaster
Other Accessories	eConnex™ Adaptors for Supported Zebra Mobile Computers Battery Locking Foot Belt Holster
Communication	
Host Connection	eConnex™ (Electronic 8-pin Connection) Bluetooth 5.3 USB-C Cable USB Cable Cup
Host Computer	Zebra mobile computers and tablets 3rd-party smartphones and tablets Windows-based PCs
Mobile Computer Adaptors	eConnex™, Bluetooth, OtterBox uniVERSE Case System
Bluetooth Profiles Supported	SPP Profile HID Profile Apple iAP2/MFi
Remote Management	Wi-Fi 6 Ethernet Cradles Via Attached Host Device

Markets and Applications

Retail

- Cycle Counting
- |tem 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

Regulatory	
EMI/EMC	FCC Part 15 Subpart B Class B; ICES 003 Class B; 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) 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; 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 LED product per IEC/EN 62471

Footnotes

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