RFD8500 Series

Easily add high-performance UHF RFID and barcode capture to the mobile devices of today and tomorrow

With the RFD8500, you can empower select Zebra and compatible third-party mobile devices, tablets and smart phones with enterprise-class UHF RFID and 1D/2D barcode scanning technology, whenever and wherever you need it — simply, easily and cost-effectively. Pair the Bluetooth®-enabled sled with your mobile device and attach the mobile device to the RFD8500 for a single-handed RFID reader solution. Or put the mobile device in a pocket or holster and use the RFD8500 in standalone mode. With support for Android™, iOS®, and Windows®, you get real investment protection. When it comes to performance, whether your workers are capturing RFID tags or barcodes, the RFD8500 is unparalleled. Workers can capture tags and barcodes faster and with ease, improving productivity, operational efficiency and customer service.

Empower your handhelds with RFID

Multi-OS and multi-platform
Leverage your mobile computing strategy and add world-class data collection capability in an economical way. Provides the peace of mind that the investment you make today will serve your business needs tomorrow.

Fast RFID tag capture in various environments
With AutoMac[1] and our patent-pending breakthrough antenna design, you get maximum read/write speeds and coverage required to maximize workforce efficiency.

High performance battery for full shift operation
Our unique power-optimizing algorithm delivers the superior battery cycle times that ensure full-shift power, even with intensive usage.

Flexible connectivity options: Bluetooth or Batch Mode
Enable a real-time wireless connection to your mobile or backend systems via Bluetooth 2.1 or later. If a wireless connection is not available, batch mode enables the collection of up to 500 barcodes and/or 40,000 RFID tags. Just sync to upload the data from the RFD8500 to the host device at any time.

Flexible deployment options
Permanently attach to a compatible mobile device to create a dedicated inventory management device; temporarily attach to enable RFID when and where you need it on the mobile device of your choice, bringing comfort to inventory management tasks; deploy as separate devices — workers can put the host mobile computer in a pocket or on a desk to protect the device and create a lighter RFID solution.

Easy to deploy: Attach and remove in seconds with standard Quad Lock mounts and custom-tailored adapters
Just twist to lock onto or remove the RFD8500 from any Zebra or third-party mobile computer via a Quad Lock or slide-on/slide-off Zebra custom-tailored adaptor.

The RFD8500 — the right device makes all the difference.
For more information, visit www.zebra.com/rfd8500

Prevent counterfeiting and protect consumer privacy with EPC Global Gen2 v2
Protect profitability, customer safety and privacy with some of the latest RFID features. Cryptographic tag authentication provides extensive protection against tag cloning, allowing you to deploy non-clonable tags to prevent counterfeit product from entering your supply chain. In addition, the RFD8500 allows businesses to protect consumers' post-sales privacy. For instance, when a purchased product is returned for a full refund or exchange, the data is hidden until a tag is interrogated by the RFD8500 with an untraceable privilege.

Instantly capture any printed or electronic 1D/2D barcode
Zebra's SE4710 enterprise-class imager offers proprietary PRZM Intelligent Imaging technology, a megapixel sensor and advanced optics for lightning-fast capture of 1D and 2D barcodes — even if they are dirty, damaged or poorly printed.

Easily toggle between RFID and barcode scanning
Users can simply tap on a button to switch between RFID and barcode scanning modes on the fly, maximizing ease-of-use and productivity.

Fast and easy application development with Zebra's unique ZETI protocol
Our powerful Zebra Easy Text Interface (ZETI) can be used across many OS platforms, reducing the need to utilize a Software Development Kit (SDK) to integrate RFD8500 features into your application. This human readable ASCII protocol makes it fast and easy for the host to communicate with RFD8500 without the need to create an actual application, reducing application development time and cost.

Enterprise-class charging solutions for easy power management
The RFD8500 is compatible with the Zebra TC55 broad eco-system of charging accessories, potentially reducing or even eliminating the need to purchase charging solutions.

Deploy all around the world
The RFD8500 offers the style you need for customer-facing areas as well as the durability for all-day everyday business use, making it ideal in just about every industry. And with regulatory approvals for over 80+ countries, the RFD8500 can be deployed globally across your operations.

Specifications

Physical Characteristics

Dimensions	5.1 in. H x 3.1 in. W x 7.3 in. L 13 cm H x 8 cm W x 18.5 cm L
Weight	Imager Version: 15.3 oz./~435 grams; Non-Imager version: 15.3 oz./~430 grams
Power	PowerPrecision Li-Ion batteries, 4410 mAh
Configurations	RFID-only or RFID with SE4710 Imager
Power	PowerPrecision+ Lithium ion 7000 mAh with hot swap battery backup
Notification	LED and audible tone
User Input	Trigger, 3 push button switch

RFID Performance

Standards Supported	EPC Class 1 Gen 2; EPC Gen2 V2
RFID Engine	Zebra Proprietary Radio Technology
Fastest Read Rate	900+ tags/sec
Nominal Read Range	20+ ft./6+ m
Frequency Range/ RF Output	US: 4.5 – 34.5 dBm EU: 4.5 – 34.5 dBm JP (LBT): 4.5 – 33 dBm JP: 4.5 – 27.5 dBm
Batch Mode Memory	Store 40,000+ RFID Tags, 500 barcode

User Environment

Drop Specification	Multiple 4 ft./1.2 m drops to concrete (0° to 40° C)
Tumble Specification	1000 drops (500 tumbles, 1.6 ft./0.5 m) at room temperature
Operating Temp.	-10°C to 40°C/14°F to 104°F
Storage Temp.	-40°C to 70°C/-40°F to 158°F
Charging Temp.	0°C to 40°C/14°F to 104°F
Humidity	5-85% non-condensing
Electrostatic Discharge	+/-15kV air discharge +/-8kV direct discharge +/-8kVdc indirect discharge
Sealing	IP52

Communication

Bluetooth	Bluetooth Version 2.1 SPP profile HID Profile Apple iAP2/MFi
Bluetooth Class	2
Bluetooth Pairing	Secure Simple Pairing 'just works' method
Compatible Host Devices (Bluetooth)	Devices with Android 4.4 or iOS 8 OS

Accessories

External Interface	MicroUSB Connector and Charging Cradle-based charging
Other Accessories	Adapter mounts for Enterprise Zebra Mobile Computers; Quad lock adapter for variety of smart phones

Regulatory

EMI/EMC	FCC Part 15 Subpart B Class B; ICES 003 Class B; EN 301 489-1; EN 301 489-3; EN 301 489-17; EN 55022 Class B; EN55024; EN 55032 Class B
Electrical Safety	UL 60950-1, CAN/CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
RF Exposure	EU: EN 50364, EN 62479; USA: FCC Part 2 (Section 2.1091), OET Bulletin 65 Supplement C; Canada: RSS-102
RFID/Bluetooth	EU: EN 300 328, FCC Part 15 Subpart C; Canada: RSS-247

Warranty

Subject to the terms of Zebra's hardware warranty statement, the RFD8500 is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For complete warranty statement, go to: http://www.zebra.com/warranty

Footnotes

1. AutoMac is a self-optimizing radio feature that automatically adapts to fast tag reading in various environments.