MC3330R Integrated UHF RFID Reader

Best-in-class mid-range RFID read performance with a powerful Android platform

RFID brings a new level of efficiency to inventory and asset management, order fulfillment and more. To maximize productivity, you want to give your workers a device that provides a new level of comfort, task speed, ease of use and accuracy to your RFID applications. The MC3330R handheld RFID reader delivers it all. You get the signature rugged design of Zebra's industrial handheld products for maximum uptime. The MC3330R is one of the lightest devices in its class with the right ergonomics for all-day comfort. Superior RFID read performance and receiver sensitivity enable lightning fast capture of even the most challenging RFID tags. Workers can read both RFID tags and barcodes with point and shoot simplicity. And you can create intuitive Android applications that use the MC3330R's powerful computing platform, large touchscreen, and physical keypad. The MC3330R — the next evolution in handheld RFID readers.

Low TCO with Flexible Development Tools

Simplify Application Development with a Common Platform

If you are using other Zebra RFID handheld readers across your supply chain, you can streamline application development with a single software development kit. There's no need to learn a different app development framework or rewrite an application — use the same SDK for the MC3330R, MC3390R, RFD2000 and RFD8500 RFID Sled.

Simplify Full-Fleet Rollouts with Emdk and RFID Sdk for Xamarin

Xamarin's cross-development platform lets developers use their C# skills and tools to develop fast, beautiful apps for Android devices. And with Zebra's EMDK and RFID SDK for Xamarin, it's easy to incorporate all the advanced enterprise features of the MC3330R into your Xamarin apps. Our EMDK simplifies enterprise application design for faster, more cost-effective development cycles, while our RFID SDK for Xamarin allows you to use RFID apps you've developed for other Zebra devices on the MC3330R.

Zebra's Signature Rugged Design

Rugged and Ready for All-Day Use

The MC3330R offers a new higher 5 ft./1.5 m drop specification and with IP54 sealing, it can handle splashing liquid and dust. The Corning Gorilla Glass touch panel and imager window bring maximum scratchresistance and shatter-proofing to two of the most vulnerable device features. The result? Workers can drop the MC3330R on concrete and use it in dusty areas — and still expect reliable operation.

Unparalleled Data Capture Performance and Flexibility

Extraordinary RFID Performance — Flexible, Fast and Accurate

The MC3330R's integrated circular antenna delivers extraordinary reliability no matter the orientation of the tag. Workers can accurately and rapidly capture RFID tags on even the most challenging items in half the time as the next leading competitor (Based on Zebra test results from specific use cases) — from a shelf of clothing in a retail stock room to a box of files in the office.

WiFi CERTIFIED

The MC3330R integrated RFID reader — A next generation Android experience meets best-in-class RFID performance.
For more information, visit www.zebra.com/mc3330R

Superior Sensitivity for Greater Accuracy

Zebra's high-performance ASIC radio technology delivers a read rate that is more than 25% faster and over 40% more accurate* than other devices in this class.

Integrated Enterprise-Class 1D/2D Barcode Scanning

Zebra's advanced scanning technology delivers lightning fast standard-range capture of printed and electronic 1D and 2D barcodes, regardless of condition. The expanded working range and wide field of view allow workers to scan barcodes nearer and farther away, while omnidirectional scanning ensures true point and shoot performance.

Easy-To-Use Locating Technology

The MC3330R can help pinpoint the location of a specific item. Geiger Counter mode uses audible and visual cues to quickly guide workers to the location of any desired item.

Automatically Capture Data on Labels and Forms

Capture multiple barcodes on a single label or data on a form, such as checkboxes, text fields, signatures and more? You can do it all with the press of a single button with Zebra's SimulScan, a no-cost Mobility DNA application..

Powerful Platform for Demanding Enterprise Applications

Extended Battery Life

With the MC3330R's high capacity, field-replaceable PowerPrecision+ battery, you can count on dependable power for every shift. The battery lasts more than five hours with typical use — nearly 35% longer than the next leading competitor. And Zebra's PowerPrecision+ technology provides a full suite of metrics that make it easy to identify, remove and replace aging batteries.

Lightweight and Streamlined Design

With its rugged design and compact ergonomics, the MC3330R is one of the lightest UHF RFID readers in its class and is built for easy one-handed use, whether workers are right- or left-handed.

Unparalleled Computing Power

The MC3330R offers the most processing power and memory out of any device in its class. No matter how many applications your workers need to run, the MC3330R has the power to run them all.

Backwards Accessory Compatibility

You can use most of the MC3200 accessories you already own for a very cost-effective upgrade. Or choose from many new accessories with advanced features.

Simplify Data Entry with a Keypad and Large Touchscreen

The Perfect Combination: Large Touchscreen and Keypad

Your application can utilize the entire display, while the physical keypad lets you give your workers the exact same experience they have today. The MC3330R has the largest touchscreen in its class for easier readability and more intuitive touch-based interactions.

Easily Transition to Android and Modern Touch Interfaces

With the MC3330R, you can migrate to Android without changing the experience you have in place today. The MC3330R supports leading Terminal Emulation apps, including Ivanti Velocity. And with AllTouch TE, an optional Mobility DNA solution, you can transform your green TE screens into elegant touch-based screens.

Three Physical Keypad Options

Choose the keypad that makes data entry as easy as possible for your workers — alphanumeric, numeric and functional numeric.

Feedback for Any Environment

With high visibility LEDs, workers can easily keep track of charging status and confirm a task was completed, even in the noisiest environments.

The Ultimate In Support And Device Management Options

Extraordinary 'Cover Everything' Service

Zebra OneCare services will keep your MC3330R up, running at peak performance. You can choose the level of service that fits your needs and your budget. You get comprehensive coverage that literally covers everything — normal wear and tear and accidental damage. And since nobody knows our products better than we do, you get unparalleled from-the-manufacturer expertise.

Operating System Support You Can Count On

Only from Zebra, LifeGuard™ for Android guarantees direct security updates for a total of up to 10 years from the release date, along with the ability to upgrade to future versions of Android. And LifeGuard is free with any Zebra OneCare™ Support contract.

Improve Device Value with Zebra's Optional Visibility Services

Zebra's VisibilityIQ™ Foresight gives you easy access to clear, comprehensive MC3330R device data. VisibilityIQ Foresight aggregates your big data onto a single, color-coded, cloud-based pane of glass and translates it into action-ready insight. It also collects historical data for trending and predictive intelligence so you can catch problems before they impact your business and accurately forecast future needs for smoother operations. This service is available alongside a Zebra OneCare support services contract.

Specifications

Physical Characteristics

Dimensions	6.45 in. L x 2.95 in. W x 8.31 in. D 164 mm L x 75 mm W x 211 mm D
Weight	23.4 oz./665 g (with handstrap)
Display	4.0 inch capacitive; WVGA; color
Imager Window	Corning Gorilla Glass
Touch Panel	Corning Gorilla Glass touch panel with air gap
Backlight	LED backlight
Expansion Slot	Micro SD card slot, up to 32GB
Network Connections	USB 2.0 High Speed (host and client), WLAN and Bluetooth
Notification	Side LEDs and audible tone
Keypad	Numeric (29 key), Function Numeric (38 key), Alpha Numeric (47 key)
Voice	PTT Voice Support (Internal Speaker)
Audio	Speaker

Performance Characteristics

CPU	Qualcomm 8056 1.8 GHz hexa-core 64-bit with power optimization
Operating System	Android 8.0 (Oreo) GMS: Worldwide AOSP: China and Israel only
Memory	4GB/32GB
Power	PowerPrecision+ Li-Ion 5200 mAh with fast charging support

User Environment

Operating Temp.	-4° F to 122° F/-20° C to 50° C
Storage Temp.	-40° F to 158° F/-40° C to 70° C
Humidity	5% to 95% RH (non-condensing)
Drop Spec.	Multiple 5 ft./1.5 m drops to concrete over the entire operating temperature range
Tumble Spec.	1,000 1.6 ft./0.5 m tumbles
Sealing	IP54
Vibration	5Hz to 2KHz
Thermal Shock	-40° F to 158° F/-40° C to 70° C
Electrostatic Discharge (ESD)	+/- 20kV air, +/-10kV contact discharge

Interactive Sensor Technology (IST)

Motion Sensors	3-axis accelerometer; gyroscope

Barcode Scanning

Scan Engine	SE4750SR with LED Aimer

Connectivity

Radio	802.11 a/b/g/n/ac/d/h/i/k/r/w
Data Rates	2.4GHz: 144Mbps 5GHz: 867Mbps
Operating Channels (depending on Regulatory)	2.4GHz: 1 to 13 5GHz: 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
Security and Encryption	WEP, WPA/WPA2 PSK, WPA/WPA2 Enterprise
Certifications	802.11n/ac, WMM-PS, WMM-AC, PMF, Voice Enterprise, Wi-Fi Direct, WPS
Fast Roam	PMKID/OKC/CCKM/802.11r
Bluetooth	v4.1, v2.1 + EDR w/ Bluetooth Low Energy (BLE)

Accessories

Single Slot Cradle with Spare Battery Charger; 4-Slot Charge Only Cradle with 4-Slot Battery Charger; 4-Slot Ethernet Cradle with 4-Slot Battery Charger; 5-Slot Charge Only Cradle; 5-Slot Ethernet Cradle

Regulatory

EMI/EMC	FCC Part 15 Subpart B Class B; ICES 003 Class B; EN 301 489-1; EN 301 489-3; EN 55024; 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 62369-1, EN 50566, EN 62311 USA: FCC Part 2, 1093 OET Bulletin 65 Supplement 'C' Canada: RSS-102

Warranty

Subject to the terms of Zebra's hardware warranty statement, the MC3330R 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: www.zebra.com/warranty

Recommended Services

Zebra OneCare Essential and Select support services Zebra Visibility Services - VisibilityIQ Foresight

Mobility DNA

Mobility DNA solutions help you get more value out of our mobile computers by adding functionality as well as simplifying deployment and management of our mobile devices. For more information on these Zebra-only features please visit: https://developer.zebra.com/mobilitydna

Markets and Applications

Back-of-Store Retail

• Inventory/cycle counting
• Automatic replenishment
• Receiving/shrink control
• Omni-channel order fulfillment
• Item finding

Data Center/Offices

• Asset management and tracking

Healthcare

• Inventory/cycle counting
• Asset management (for critical assets)
• Item finding
• Parts tracking
• Pharmaceutical and laboratory inventory
• Trunk stock demo/ sample inventory (medical device and pharmaceutical manufacturers)

RFID

Standards Supported	EPC Class 1 Gen2; EPC Gen2 V2; ; ISO-18000-63
RFID Engine	Zebra Proprietary Radio Technology
Fastest Read Rate	900+ tags/sec
Nominal Read Range	~19.7+ ft./~6+ m
RFID Power Output	0 dBm to +30 dBm
RFID Antenna Type	Integrated Circular Polarized
Frequency Range	865-928MHz *Specific regional and country settings supported upon country selection

Mobility DNA is available, on Android only. Features may vary by model and a Support Contract may be required. To learn what solutions are supported, please visit: https://developer.zebra.com/mobilitydna
Specifications subject to change without notice.