



# MC3390R Integrated Long-Range UHF RFID Reader

## BEST-IN-CLASS RFID READ RANGE WITH A POWERFUL ANDROID PLATFORM

In the warehouse, on the loading dock, or in the storeroom, you need to know what you have and where you have it. The MC3390R long-range RFID reader brings a new level of efficiency and accuracy to inventory management, order fulfillment, cross-docking and more. With Zebra's signature rugged design, the MC3390R is built for your semi-industrial environments — yet is lightweight with the right ergonomics for all-day comfort. The integrated long-range antenna delivers best-in-class RFID read range and higher throughput, so inventory counts can be accomplished more quickly and accurately. Workers can read both RFID tags and barcodes with point and shoot simplicity — including long-range barcode capture. And you can create intuitive Android applications that use the MC3390R's powerful computing platform, large touchscreen, and physical keypad. The MC3390R — the next evolution in long-range 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 RFID application development with a single RFID software development kit. There's no need to learn a different app development framework or rewrite an application — use the same RFID SDK for the MC3390R, MC3330R, 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 MC3390R 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 MC3390R.

### Rugged and ready to work

#### Built for semi-industrial environments

The MC3390R offers a 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 scratch-resistance and shatter-proofing to two of the most vulnerable device features. The result? Workers can expect reliable operation despite the inevitable drops and spills.

### Unparalleled data capture performance and flexibility

#### Best-in-class RFID read range and accuracy

The integrated long-range antenna can capture RFID tags more than 60 ft./18.2 m away — 200% farther than the next leading competitor. This reliable, long-range RFID performance enables more frequent and more accurate inventory-count operation, so you can better manage your on-the-floor, backroom and distribution inventory.

#### Superior sensitivity for greater accuracy

Zebra's high-performance ASIC radio technology provides superior sensitivity and greater read accuracy, delivering a read rate that is more than 25% faster and over 40% more accurate\* than other devices in this class.

#### Integrated mid-range or long-range 1D/2D barcode scanning

Workers don't need different devices to capture RFID tags and barcodes — the MC3390R can capture it all. Choose between a mid-range scan engine or the extra long-range scan engine that can capture barcodes from 3 in./7.62 cm to as far as 70 ft./21.4 m away. Both options offer Zebra's advanced scanning technology for lightning fast capture of 1D and 2D barcodes, regardless of condition.



**THE MC3390R INTEGRATED LONG-RANGE RFID READER — A NEXT GENERATION ANDROID EXPERIENCE MEETS BEST-IN-CLASS RFID PERFORMANCE.**

**FOR MORE INFORMATION, VISIT [WWW.ZEBRA.COM/MC3390R](http://WWW.ZEBRA.COM/MC3390R)**

### Easy-to-use locating technology

The MC3390R 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

Need to 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 MC3390R'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. A convenient LED indicator lets users know when to change the battery. 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

Your environments demand a rugged design, but workers need a device that is easy to carry and use throughout the day. The MC3390R offers the best of both worlds: Zebra's rugged design with compact ergonomics. The MC3390R 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

This powerhouse of a mobile device is built to deliver stellar application performance. The MC3390R 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 MC3390R 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 — including universal ShareCradles that make backroom management easy and cost-effective.

## Simplify data entry with a keypad and large touchscreen

### The perfect combination: large touchscreen and keypad

Whether your application requires touch or physical keypad input, we've got you covered. Your application can utilize the entire display, while the physical keypad lets you give your workers the exact same experience they have today. The MC3390R 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 MC3390R, you can migrate to Android at your own pace — and without changing the experience you have in place today. The MC3390R 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. LEDs are located on both sides of the device to ensure visibility from any angle.

## The ultimate in support and device management options

### Extraordinary 'cover everything' service

Zebra OneCare services will keep your MC3390R up, running at peak performance and in like new condition. 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 — today and tomorrow

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. LifeGuard Analytics makes it easy to view available updates and automatically update your devices over the air with the press of a button. And LifeGuard is free with any Zebra OneCare Support contract.

### Improve device value with Zebra's optional Visibility Services

Get the device management data you need to take device uptime, operational efficiency and the return on investment to the next level with Zebra's optional Visibility Services. Asset Visibility Service (AVS) is an easy to use and easy to deploy solution that doesn't require an Enterprise Mobility Management (EMM) system. Operational Visibility Services (OVS) is a comprehensive device management solution that leverages and adds to the information in an EMM to help you get more value out of your Zebra mobile devices. Both services are options that are available through any Zebra OneCare support contract.

\* Based on Zebra test results from specific use cases.

# MC3390R Specifications

| PHYSICAL CHARACTERISTICS            |  |
|-------------------------------------|--|
| Dimensions                          | 6.45 in. L x 3.78 in. W x 10.67 in. D<br>164 mm L x 96 mm W x 271 mm D             |
| Weight (with handstrap)             | MC3390R with SE4750MR: 26 oz./740 g<br>MC3390R with SE4850: 27 oz./765 g           |
| Display                             | 4.0 inch capacitive; WVGA; color   |
| Imager Window                       | Corning Gorilla Glass  |
| Touchpanel                          | 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 7.0 (Nougat)<br>GMS: Worldwide<br>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 Specifications                 | Multiple 5 ft./1.5 m drops to concrete over the entire operating temperature range |
| Tumble Specification                | 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  |

| 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  | ~60+ ft./~18.2+ m  |
| RFID Power Output   | 0 dBm to +30 dBm   |
| RFID Antenna Type   | Integrated Linear Polarized  |
| Frequency Range     | 865-928MHz<br>*Specific regional and country settings supported upon country selection |

| BARCODE SCANNING |  |
|------------------|--|
| Scan Engines     | SE4750MR Imager with Laser Aimer<br>SE4850 Extended Range Imager |

| CONNECTIVITY                                 |  |
|--|--|
| Radio  | 802.11 a/b/g/n/ac/d/h/i/k/l/r/w  |
| Data Rates                                   | 2.4GHz: 144Mbps<br>5GHz: 867Mbps   |
| Operating Channels (depending on Regulatory) | 2.4GHz: 1 to 13<br>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<br>USA: FCC Part 2, 1093 OET Bulletin 65 Supplement 'C'<br>Canada: RSS-102 |

**WARRANTY**

Subject to the terms of Zebra's hardware warranty statement, the MC3390R is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For complete warranty statement, please visit: <http://www.zebra.com/warranty>

**RECOMMENDED SERVICES**

Zebra OneCare Essential and Select support services  
Zebra Visibility Services — Asset Visibility Service (AVS) and Operational Visibility Service (OVS)

## MC3390R vertical markets and applications:

### SUPPLY CHAIN/ TRANSPORTATION & LOGISTICS

- Cross-docking
- Item tracking/locating

### WAREHOUSING

- Inventory/cycle counting
- Automatic replenishment
- Receiving/shrink control
- Item tracking/locating
- Omni-channel order fulfillment

### MANUFACTURING

- WIP
- Parts and finished good inventory

**PRODUCT SPEC SHEET**

**MC3390R INTEGRATED LONG-RANGE UHF RFID READER**



**MOBILITY DNA SOFTWARE**

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 [www.zebra.com/mobilitydna](http://www.zebra.com/mobilitydna)



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.



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