



# Achieve Peak Efficiency with an RFID Handheld Reader Built for Long-Range Applications

## The Challenge: Managing inventory in semi-industrial environments

Whether you need to pick goods at a distribution center or keep inventory stocked for the manufacturing line, RFID enables workers to execute tasks with greater efficiency and accuracy. With an RFID reader in hand, warehouse workers can significantly reduce travel time when picking and putting away inventory, as well as dramatically improve the accuracy of inventory counts, order fulfillment, shipping and receiving.

However, today's warehouses and distribution centers are vast, with endless aisles and products placed on the highest shelves to maximize available space. In these environments, if an RFID reader is not designed for long-range reading, workers will need to walk the length of the warehouse to read an RFID tag or may not be able to reach all the goods on the top shelf. Metal shelving, common in the warehouse, can severely degrade the RFID signal — making it harder to get a successful read. Concrete floors and low temperatures require a rugged product design. And the end of support for Microsoft mobile operating systems requires a new future-ready platform — without disrupting the workflow and applications you already have in place.

## The Solution: Zebra MC3390xR — the next evolution in long-range handheld RFID readers

With the MC3390xR integrated long-range UHF/RAIN RFID handheld reader, you get the technology and platform to meet the needs of challenging RFID applications in the warehouse, distribution center and manufacturing floor. Its integrated long-range antenna captures RFID tags more than 60 ft./18.2 m away — 200% farther than the next leading competitor\*. Reliable, long-range RFID performance enables more frequent and more accurate inventory-counts, so you can better manage inventory. You get a choice of integrated barcode scanning options, including an extended range scan engine that can capture barcodes as far as 70 ft./21.4 m away. The MC3390xR offers the proven lightweight ergonomic design of the MC3300R family, now with Zebra's latest, most powerful and secure Android architecture. As an integrated solution, the MC3390xR provides the simplicity of a single battery to charge and manage — along with a rugged 5 ft./1.5 m drop specification. And the large 4-inch touchscreen, powerful processor and choice of keypads can meet your application needs today and tomorrow.



## MC3390xR in Warehousing

Gain the real-time inventory visibility needed to operate more efficiently, responsively and profitably

In warehouses, the demands of the omnichannel retail world are creating a major increase in volume. In order to meet customer expectations, you need to have an accurate view of inventory across your entire supply chain at any given moment. RFID enables warehouses to manage massive inventories and provides the actionable intelligence to ensure product deliveries are accurate, complete and on time — as well as provide a level of visibility that helps eliminate shortages, disputes and costly write-downs. With the MC3390xR, your warehouse will have the real-time inventory visibility needed to succeed.

Application	Benefits
<p><b>Inventory counts</b>                      With the MC3390xR in hand, workers can simply walk through warehouse aisles and take a full inventory in minutes. The long-range antenna can capture RFID tags more than 60 ft./18.2 m away — 200% farther than the next leading competitor*. Workers can scan barcode labels on items that are not tagged with RFID or have an RFID tag with a damaged chip or antenna.</p>	<p>Faster inventory counts, since workers can capture items that are farther away; enables more frequent inventory counts for more accurate data.</p>
<p><b>Automatic replenishment</b>                      With more frequent and accurate counts, warehouses can quickly identify replenishment needs and out-of-stocks.</p>	<p>Reduce or virtually eliminate lost sales due to out-of-stocks; maintain leaner inventory levels and reduce associated carrying costs.</p>
<p><b>Receiving</b>                      With the MC3390xR, workers can instantly verify the contents of received shipments; with best-in-class receiver sensitivity, the MC3390xR can accurately read tags on items deep inside the shipping box.</p>	<p>Improve stock flow from the receiving dock to the warehouse shelf; easily verify all incoming shipments and contents to reduce shrink.</p>
<p><b>Omnichannel fulfillment</b>                      Frequent inventory counts provide accurate store-level inventories to support BOPIS (Buy Online Pickup In Store), BOPAC (Buy Online Pickup At Curb) and ship-from-store models.</p>	<p>Increase customer service and minimize lost sales; no need to worry about canceling or delaying a customer order due to an inventory inaccuracy.</p>
<p><b>Item finding</b>                      With Item Finder mode, the MC3390xR can easily pinpoint the location of an item, whether it's in the farthest corner of the warehouse or on the tallest rack.</p>	<p>Dramatically reduce task time and increase the efficiency of picking operations; quickly track down mis-shelved or misplaced items.</p>





## MC3390xR in Transportation & Logistics

### Increase efficiency at the dock doors

As a T&L operator, one of your primary objectives is to increase efficiency throughout operations — in receiving, shipping, putaway and picking. The MC3390xR can help you achieve that objective by minimizing the number of times inventory must be moved and the time spent finding specific assets.

Application	Benefits
<p><b>Cross-docking</b> Workers can instantly verify the contents of incoming shipments and identify the right destination dock; any exceptions can be handled instantly — the MC3390xR can write RFID tags to retag an item.</p>	<p>Improve efficiency and accuracy of cross-docking operations; verify all incoming shipments and contents to reduce shrink.</p>
<p><b>Item finding</b> With Item Finder mode, the MC3390xR can easily pinpoint the location of a specific asset, pallet or box. When a truck arrives with an incoming shipment, a dock worker can quickly identify which pallet(s) should be removed.</p>	<p>Increase efficiency of receiving operations; enable trucks to make more stops per day.</p>

## MC3390xR in Manufacturing

### Real-time visibility for superior work control

RFID enables manufacturers to implement leaner business practices that result in greater revenue and profits. The MC3390xR improves the accuracy and efficiency of inventory and work-in-process tracking, boosting throughput and reducing errors and costs.

Application	Benefits
<p><b>Work-in-process tracking</b> Workers and supervisors can simply walk through the manufacturing floor and capture a full inventory of components and assemblies in minutes. With the MC3390xR's industry-best long read range, users can more efficiently read every tag without having to walk to each workstation or climb aboard an aircraft assembly.</p>	<p>Reduce time spent tracking; tracking can be performed more frequently for more granular, real-time visibility; better monitor work-in-process to ensure the right materials are being used to produce the right products for the right orders.</p>
<p><b>Parts and finished goods inventory</b> With the MC3390xR, workers can instantly capture the location of general inventory and assets.</p>	<p>Ensure that material and product inventories are correct, stored where they belong, and properly prepared for shipping to distributors/customers.</p>



## APPLICATION BRIEF

MC3390xR INTEGRATED LONG-RANGE RFID HANDHELD

# The Right Solution for the Job

The MC3390xR is loaded with features that bring a new level of task speed, ease of use and accuracy to inventory management, order fulfillment, cross-docking and more...

- Long-range antenna can capture RFID tags more than 60 ft./18.2 m away — 200% farther than the next leading competitor\*
- Zebra's high-performance ASIC-based 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\*
- Choice of mid-range barcode scan engine or extended range scan engine that captures barcodes from 3 in./7.62 cm to as far as 70 ft./21.4 m away
- Rugged and ready for semi-industrial environments: IP54 sealed, built to withstand 5 ft./1.5 m drops to concrete and Gorilla Glass reinforces the touchpanel and imager window
- Wide operating temperature, -4° F to 122° F/-20° C to 50° C, for reliable operation in extreme climates
- Superior app performance and future-proofing with Android 10 and ultra-powerful processor
- Large 4-inch touch display and choice of three physical keypads — easy to use even with gloves
- Supports TE applications — no need to change your current workflows, while offering an easy path to modern, touch-based applications
- Class-leading 7000mAh PowerPrecision+ battery to power full shifts
- Common EMDK and RFID SDK with other Zebra RFID handheld readers and sleds; simplifies application development across different types of products
- Integrated NFC enables users to securely authenticate with their employee ID badge, instead of entering and managing complex passwords
- One of the lightest devices in its class for all-day comfort

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



## Zebra RFID. More transformation. No complication.

While RFID is enticing, it wasn't always practical. Now, the long-awaited potential of consistent and reliable RFID is here and within reach. Get robust gains without the pains.

Leverage Zebra's decades of expertise, design thinking and software development to achieve maximum RFID efficiency, while minimizing the pains of multi-vendor solutions. Unlike other players, Zebra gives you the industry's broadest, field-proven RFID portfolio for unmatched accuracy and interoperability. Connect it all and create a platform that elevates every system, device, tag and worker.

Now you're in command, but not on your own. With an ecosystem of support and partners to guide you, the way forward is clear.



**NA and Corporate Headquarters**  
+1 800 423 0442  
inquiry4@zebra.com

**Asia-Pacific Headquarters**  
+65 6858 0722  
contact.apac@zebra.com

**EMEA Headquarters**  
zebra.com/locations  
contact.emea@zebra.com

**Latin America Headquarters**  
+1 847 955 2283  
la.contactme@zebra.com