



# 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 the verification and proof of delivery.

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 MC3390R — the next evolution in long-range handheld RFID readers

With the MC3390R, 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. The MC3390R's Android OS delivers an intuitive user experience, while giving your business a modern computing platform with long-term security and support. With Zebra's signature rugged design, the MC3390R is built for semi-industrial environments — yet is lightweight with the right ergonomics for all-day comfort. And you also get a large 4-inch touchscreen with a choice of three keypads to meet your application needs today and tomorrow.



## MC3390R 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 MC3390R, your warehouse will have the real-time inventory visibility needed to succeed. Here's how:

Application	Benefits
<p><b>Inventory counts</b> With the MC3390R 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*.</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 MC3390R, workers can instantly verify the contents of received shipments; with best-in-class receiver sensitivity, the MC3390R 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 inventories to support BOPIS (Buy Online Pickup in Store) and ship-from-store models.</p>	<p>Increase customer service and minimize lost sales; no need to worry about cancelling or delaying a customer order due to an inventory inaccuracy.</p>
<p><b>Item Finding</b> With Tag Finder mode, the MC3390R 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>







## MC3390R 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 MC3390R 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 MC3390R 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 Tag Finder mode, the MC3390R 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>

## MC3390R 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 MC3390R 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 can simply walk through the manufacturing floor and capture a full inventory of components and assemblies in minutes.</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 MC3390R, 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

MC3390R INTEGRATED LONG-RANGE RFID HANDHELD

# The Right Solution for the Job

The MC3390R long-range RFID reader is loaded with features that bring a new level of task speed, ease of use and accuracy to inventory management, order fulfillment, cross-docking applications 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\*
- Rugged and ready for semi-industrial environments: IP54 sealed, built to withstand 5 ft./1.5 m drops to concrete and Gorilla Glass reinforces two of the most vulnerable components — the touchpanel and imager window
- Wide operating temperature, -4° F to 122° F/-20° C to 50° C, for reliable operation in extreme climates
- 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
- Android Nougat and the most processing power and memory in its class to deliver superior app performance and future-proofing
- PowerPrecision+ battery lasts more than five hours with typical use — nearly 35% longer than the next leading competitor\*
- Common EMDK and RFID SDK with other Zebra RFID handheld readers and sleds; simplifies application development across different types of products
- One of the lightest devices in its class for all-day comfort

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



## Why choose Zebra for RFID?

Only Zebra provides end-to-end solution simplicity, with everything you need to implement RFID in your organization — from well-tested industry-leading infrastructure to the expertise you need to maximize the benefits of RFID in your enterprise. Zebra has more fixed, handheld and portal RFID systems installed than any other RFID provider, so you get the peace of mind that comes from choosing RFID products that are well-tested in practically every industry. And with over 550 RFID technology patents that have allowed us to deliver many industry firsts, you can count on advanced technologies that will maximize the performance of your RFID solution.



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