



## Boost worker productivity in your manufacturing operations with next-generation wearable hands-free scanning

### The challenge: Increased competition demands a new level of efficiency

Today's online economy is generating a massive increase in order volume and complexity, with ever-shorter fulfillment and delivery windows. Winning in this environment requires flawless task accuracy and maximum efficiency. In order to ensure the right step is taken at the right time, your workers are using handheld devices to scan barcodes in every corner of your facility — from the production line to the raw materials and finished goods warehouses. But in order to capture barcodes, workers need to pick up, aim, scan and set down handheld devices — time that could be much better spent assembling another part or picking another item to fulfill an order. When every second counts, every workflow is disrupted. Worker productivity is reduced, impacting end-to-end operations — from order fulfillment time and production levels to throughput and profitability.

### The solution: enable frictionless processes with the RS5100 single-finger Bluetooth ring scanner

Now, you can enable frictionless workflows throughout your manufacturing operations with Zebra's industrial single-finger RS5100 Bluetooth Ring Scanner. This nearly weightless wearable scanner provides constant and instant access to the scan button, so workers can continually use their hands to perform tasks. Time previously spent managing a handheld scanning device is eliminated, boosting worker productivity.

Multiple wearing styles not only provide superior comfort — they further boost productivity. Workers can use the single-sided trigger on either hand, with or without gloves. The double trigger allows workers to switch hands on-the-fly, eliminating hand fatigue. And with the innovative top trigger on single or double trigger models, workers can wear the RS5100 on the side of a finger for a near zero protrusion above the hand — ideal for picking in tight spots.

Manufacturing environments are tough on barcode labels, so when it comes to scanning performance, you need the best. As the long-time proven leader in barcode scanning, nobody does it better than Zebra. Advanced algorithms and PRZM Intelligent Imaging enable lightning fast capture of virtually any barcode — even if they are scratched, dirty, damaged, poorly printed or under shrinkwrap. With point-and-shoot simplicity, there's no need to align the barcode and scanner. And you can choose the scanner that best meets the needs of your business — the SE4710 high performance scan engine or the SE4770 ultra-high performance scan engine for the most scan intensive applications.



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No matter how noisy your environments are, your workers will always know instantly whether a scan is successful with line-of-sight LED lights or a loud beeper. For notification of errors or exceptions, a vibration option is available.

The two-piece modular design helps prevent the spread of germs — especially crucial in today’s environment. You can give workers their own personal trigger assembly or mount — the only part of the RS5100 that touches skin.

And this cordless ring scanner can connect to whatever Bluetooth devices are in use in your facility, from wearable and vehicle mount mobile computers to tablets, printers and more.

The result? Everyone wins. Your workers enjoy the utmost in comfort, process simplicity and personal hygiene. And increased workforce productivity improves production levels, throughput, customer service levels — and the success of your business.

## What makes the RS5100 the right choice for your manufacturing facility?

The RS5100 is designed to meet the specialized needs of manufacturing operations — from the raw materials and finished goods warehouses to the production line.

<p><b>4 wearing styles</b> Comfort for every worker with top-of-finger, back-of-hand, lanyard and side-of-finger mounting for the tightest of spaces</p>	<p><b>Issue personal trigger assemblies to prevent the spread of germs</b> Protect worker health, since only the trigger assembly touches skin</p>
<p><b>Practically weightless</b> At just over two ounces, workers will barely notice the featherweight RS5100</p>	<p><b>High performance first-time every-time barcode scanning</b> Rapid-fire capture of virtually every barcode in practically any condition</p>
<p><b>Tiny</b> Only two cubic inches, so it’s not in the way — about half the size of the legacy RS507X</p>	<p><b>Split-second Bluetooth pairing</b> Just tap to pair with any NFC-enabled Zebra mobile device</p>
<p><b>Replace major components on site</b> The most vulnerable parts are integrated into the field replaceable trigger assembly — the trigger button, charge contacts and vibration engine</p>	<p><b>Compatible with virtually any Bluetooth-enabled device</b> Connect to a Zebra mobile computer, a wrist mounted wearable terminal, tablet, PC, Bluetooth hub or PLC</p>
<p><b>Rugged</b> Drop and tumble tested, sealed, sub-zero temperatures, heavy-duty trigger for millions of presses and more</p>	<p><b>Removable battery for around the clock operations</b> Swap batteries to run back to back shifts and avoid a trip to the service depot to replace an aging battery</p>

Top-of-finger mount



Side-of-finger mount



Lanyard mount



Back-of-hand mount



## RS5100: Hands-free mobility throughout your manufacturing operations

With comfortable, hands-free high-performance scanning on the fingers of your workers, you can streamline virtually any process in your plant. Capture the information you need to ensure the accuracy of every task in a split second. Time spent on data capture is greatly reduced, making your operations more lean, while workforce productivity and plant throughput reach a new high.

Raw Materials Warehouse		
APPLICATIONS	PROCESS IMPROVEMENT	BENEFITS
<b>Receiving</b>	<ul style="list-style-type: none"> <li>A quick scan of a 1D or 2D barcode on incoming materials accurately reconciles items received with the original order. No more walking to the computer to look up or print out order details.</li> </ul>	<ul style="list-style-type: none"> <li>Stage items for put-away faster, eliminating bottlenecks at the receiving dock.</li> <li>Rapid visibility into the availability of incoming raw materials on the receiving dock prevents false out-of-stocks that could cause costly unplanned production line downtime or lost sales.</li> </ul>
<b>Put-away</b>	<ul style="list-style-type: none"> <li>A scan of the item put-away location label ensures items are placed in the right location.</li> <li>The LED lights on the back of the RS5100 can light the way through the fastest path to the exact put-away location by indicating when to turn right or left, continue straight, or whether the destination has been reached.</li> </ul>	<ul style="list-style-type: none"> <li>Speed up dock-to-stock cycle times, eliminating backup in the put-away staging area.</li> <li>Items are placed on the right shelves, available for production line replenishment.</li> <li>False stock-outs are eliminated when items are misplaced, preventing lost sales or late delivery of orders.</li> <li>Prevents costly unplanned production line downtime.</li> <li>Productivity is improved through hands-free scanning. Workers can handle materials and scan simultaneously, enabling the same number of workers to complete more put-away work orders every day.</li> </ul>
<b>Inventory</b>	<ul style="list-style-type: none"> <li>The high-performance scan engines allow workers to take cycle counts and inventory faster than ever.</li> </ul>	<ul style="list-style-type: none"> <li>Accurate inventory and visibility improves management of raw and finished goods.</li> <li>Increased inventory turns.</li> <li>Reduced inventory holding costs.</li> </ul>
<b>Line-side Replenishment</b>	<ul style="list-style-type: none"> <li>Hands-free scanning allows workers to pick items for line-side replenishment faster. Workers no longer need to set items down to scan barcodes.</li> <li>When items are delivered to the production line, workers no longer need to stop to align a separate device with the barcode on the components as well as the barcode on the production station.</li> </ul>	<ul style="list-style-type: none"> <li>Protects product quality by ensuring the right parts are utilized in the right products at the right time.</li> <li>Prevents the high cost of unnecessary production line downtime when the wrong materials are delivered to a station — or not delivered in time.</li> <li>Increases workforce productivity by enabling faster completion of replenishment work orders.</li> </ul>

## Plant Floor

APPLICATIONS	PROCESS IMPROVEMENT	BENEFITS
<b>Assembly/ Batch</b>	<ul style="list-style-type: none"> <li>Parts and batches can be scanned as they enter the production line to verify that the right component is about to be utilized at the right time, without impacting workflow. Workers no longer need to pick up, align and put down another device to scan.</li> </ul>	<ul style="list-style-type: none"> <li>Ensures product quality throughout the manufacturing process.</li> <li>Increases worker productivity.</li> <li>Maximizes throughput on the production line, allowing you to increase production volume without adding workers.</li> <li>Protects customer satisfaction by ensuring items in orders are ready to ship on time.</li> </ul>
<b>Material Tracking/ Track and Trace</b>	<ul style="list-style-type: none"> <li>Additional barcodes can be captured in seconds, including serial numbers, lot numbers, expiration dates and more — regardless of symbology.</li> <li>Multiple barcodes on one or more labels can be captured with one press of the trigger with Mobility DNA's Multi-Barcode Scanning. Barcodes are captured in the right order, the data is formatted properly for the fields in your application and sent to the application in the right order.</li> </ul>	<ul style="list-style-type: none"> <li>Enables fast, cost-effective and targeted recalls when faulty materials are discovered.</li> <li>Ensures cost-effective compliance with industries that must meet track and trace regulations, such as automotive or aerospace.</li> </ul>
<b>Asset Maintenance</b>	<ul style="list-style-type: none"> <li>Hands-free scanning eliminates workflow disruption by allowing technicians to scan the barcodes on the asset that requires maintenance or repair, as well as parts and tools that are utilized.</li> </ul>	<ul style="list-style-type: none"> <li>Efficiency is improved. Maintenance technicians can complete more service orders per day.</li> <li>Production line uptime is protected. Visibility into completed maintenance and repairs ensures equipment is serviced on time to prevent unplanned downtime.</li> </ul>
<b>Asset Tracking</b>	<ul style="list-style-type: none"> <li>Barcodes can be effortlessly scanned on the many assets required in manufacturing operations, from forklifts and other material handling equipment in the warehouse to bins for work in process on the production line to tools and parts required for asset maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>Operational efficiency, workforce productivity and production levels are improved since the assets required for all processes throughout the plant are available when and where they are needed.</li> </ul>

Finished Goods Warehouse		
APPLICATIONS	PROCESS IMPROVEMENT	BENEFITS
<b>Receiving/ Put-away</b>	<ul style="list-style-type: none"> <li>When items exit the production line ready for put-away in the finished goods warehouse, a quick scan of the item can provide step-by-step instructions to the fastest path to the put-away location — workers no longer need to spend time picking up, aligning or setting down a mobile device or scanner.</li> <li>The LED lights on the back of the RS5100 can light the way by indicating when to turn, when a worker has made a wrong turn and when a worker has arrived at the destination.</li> <li>A scan of the item on the shelf tag ensures items are always placed on the right shelf.</li> </ul>	<ul style="list-style-type: none"> <li>Improve efficiency of your put-away operations — finished goods are available on your warehouse shelves faster.</li> <li>Increase warehouse accuracy — make sure finished goods are always in the right place, available to fulfill orders and preventing lost sales.</li> </ul>
<b>Picking</b>	<ul style="list-style-type: none"> <li>Hands-free scanning enables more efficient processes; workers don't need to pick up and put down a handheld scanner with each item.</li> <li>The back-of-the-hand mount or the near-zero profile when worn on the side of the finger makes it easy to pick small items especially from small bins.</li> </ul>	<ul style="list-style-type: none"> <li>Improved workforce productivity — the same number of workers can fill more orders faster.</li> <li>Improved order accuracy, customer satisfaction and customer loyalty — the right items are picked in every order and orders are fulfilled on time.</li> <li>Increased picking speed — the slim profile eliminates the need for workers to spend time maneuvering their hands to fit in small bins.</li> </ul>
<b>Packing</b>	<ul style="list-style-type: none"> <li>With hands-free scanning, the barcodes of items in an order, on the pick ticket and on the packing box can be captured more rapidly to ensure that orders are complete.</li> <li>Provide workers with the most efficient size box to minimize the use of packing materials and the shipping costs.</li> </ul>	<ul style="list-style-type: none"> <li>Order accuracy is increased.</li> <li>Customer satisfaction is increased — complete orders arrive with all the right items.</li> <li>Packing time is reduced, so more orders can be packed per worker per day.</li> <li>The cost of packing materials is minimized.</li> <li>Visibility into packing material inventory ensures ample packing materials are always available.</li> <li>Shipping costs are reduced.</li> </ul>
<b>Shipping</b>	<ul style="list-style-type: none"> <li>Workers can continually load trucks, yet capture the barcode on the parcel and the loading dock.</li> </ul>	<ul style="list-style-type: none"> <li>Shipments are loaded in the right truck in the right order, maximizing driver efficiency — less time spent locating shipments at each stop allows drivers to make more stops per day.</li> <li>Expensive mis-ships are eliminated, reducing costs and ensuring orders are always received on time.</li> </ul>

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**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

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