EMPOWERING THE NEXT GENERATION WAREHOUSE

MOTOROLA RUGGED BAR CODE SCANNERS

A broad portfolio to meet any warehouse scanning need. With Motorola's diverse warehouse scanning portfolio, you can choose the scanner that is right for the job, from corded scanners connected to your workstations to cordless scanners that can be tethered to a vehicle-mounted mobile computer. And whether you need to scan a bar code from near contact to the uppermost shelf of your tallest warehouse rack, there is a scanner that will meet your needs.

THE CHALLENGE: IMPROVING EFFICIENCY AND ACCURACY IN THE WAREHOUSE

Every minute, raw materials and finished goods move in, out and through the warehouse. Whether you are shipping finished goods to retailers, orders to customers or moving raw materials to replenish a production line, you know that the effectiveness of your warehouse impacts every aspect of your supply chain, business health and profitability. Things need to keep moving in this crucial business center. Anything less than peak efficiency can result in inventory problems, production bottlenecks, delays in order fulfillment, real or false stock-outs and more.

But if you still depend on paper processes, your workers are spending time reconciling incoming and outgoing shipments on paper forms, printing out picking orders and manually entering data into the business systems — inserting time, cost and the opportunity for errors into your everyday warehouse processes. And if you've automated your warehouse with bar code scanning but have scanners that can only capture 1D bar codes,

the onslaught of 2D bar codes that are beginning to appear in the supply chain will have to be handled as exceptions — again slowing down throughput and adding to the cost of doing business.

THE SOLUTION: HIGH-PERFORMANCE BAR CODE SCANNING IN EVERY CORNER OF THE WAREHOUSE

With Motorola's family of rugged 2D imagers, you can automate virtually every process in your warehouse. No more paper for workers to print and process, no more data entry required. The opportunity for errors in your everyday processes is virtually eliminated. With a quick scan of a bar code, incoming shipments are instantly reconciled. Items are always placed on the right shelf during put-away. The right items are always picked to fulfill orders or replenish the manufacturing line. And shipments are always placed on the right truck. The result? Time and cost is stripped out of your operation, making your warehouse leaner and able to increase throughput without increasing staff.

BUILT TO CAPTURE ANY BAR CODE IN ANY INDOOR OR OUTDOOR ENVIRONMENT

This family of imagers is built to handle the most challenging warehouse environments, period:

- **Rugged:** Performs day-in and day-out, despite drops, spills and exposure to heat, cold, grease, water and more.

- **Easy to clean:** Can be safely wiped down.

- **Choose your scan range:** No matter how close or far you need to scan, there is a Motorola handheld imager that can handle the job — even if you need to scan labels on items at near contact or on the top shelf of your tallest rack.

- **Supports every type of bar code:** Whether you need to scan 1D and 2D bar codes or IUID bar codes as well as the most challenging direct part marks (DPMs), there is an imager that will meet your needs.

- **Corded and cordless styles:** You can choose corded or cordless models that connect wirelessly via Bluetooth or your wireless LAN (WLAN), allowing you to select the wireless range that best meets the needs of your environment.

- **Unique model with display window:** We offer a unique hybrid scanner with a display to support more information-intensive warehouse applications.

- **Minimizes fatigue:** Omni-directional scanning that eliminates the need to align imager and bar code combines with award-winning ergonomic designs to bring your workers the all-day comfort needed to keep productivity high, every minute of every shift.

STREAMLINE YOUR END-TO-END WAREHOUSE PROCESSES

With our rugged handheld imagers, you can bring the next generation in automation to every inch of your warehouse:

PICKING

Motorola handheld bar code scanners heavily automate the picking process, allowing the same number of workers to not only pick more orders, but more accurate ones too. There's no need to print and distribute pick tickets, or manually enter and reconcile data when the pick is complete. Instead a split second scan of a bar code lets warehouse workers verify that they are about to select the right item, so customers always receive

2D OR NOT 2D?

While the items in your warehouse may all have 1D bar codes on their labels today, it won't be long before you'll begin to see 2D bar codes. Regardless of whether your warehouse is in a manufacturing plant storing raw and finished goods, a distribution house in the supply chain or even a warehouse in a large retail store, new government and industry regulations will drive 2D bar codes into your operations.

For example, new GS1 2D bar codes are emerging on the scene in the food and beverage, consumer goods and healthcare industries. With sunrise dates already in place in 2010, manufacturers are now using GS1 2D bar codes to improve inventory and supply chain management by including standardized information, from distributor information to product information. And traceability requirements in the food and beverage, pharmaceutical, aeronautics and automotive industries require storage of data such as lot numbers and expiration dates.

Managing the warehouse of the future will require the ability to capture both 1D and 2D bar codes throughout your warehouse processes, which in turn will require you to replace any existing 1D laser scanners with imagers. Imagers are capable of scanning both 1D and 2D bar codes, while also greatly improving user comfort in the scan-intensive jobs typical in the warehouse. Since all imagers provide omni-directional scanning on all bar code types, users never need to align scanner and bar code. Hand movements required to capture bar codes are minimized, substantially reducing the user fatigue.

orders that are 100 percent accurate. Scuffed, poorly printed and dirty bar codes never slow your workers down — our software is designed to easily capture bar codes that are 'less than perfect', as well as bar codes under several layers of shrinkwrap — without any impact on read speed. Since our imagers can read bar codes in any lighting — from near darkness to bright sunlight — they can be used inside the warehouse as well as in outdoor storage areas, such as a lumber yard.

REPLENISHMENT

When materials are needed on the production line, a quick scan allows workers to deliver the right items to the right station, on time. The efficiency and accuracy of your replenishment processes are improved, protecting against costly unplanned production line shutdowns and the resulting delays in order fulfillment.

RECEIVING

A real-time connection at the dock door increases the velocity and accuracy of your receiving function. A scan of a bar code instantly identifies and reconciles incoming shipments against the associated purchase order in seconds. Any incorrect shipments can be immediately cross-docked for return to the shipper,

Built for the warehouse…with the rugged design and scanning performance that made Motorola the industry leader in bar code scanning. Motorola scanners are at work every day in many of the world's largest warehouses, automating and error-proofing business processes to improve throughput. With 1D and 2D bar code scanning, you're ready for any bar code on any label that arrives on your dock. And all bar codes are captured with a pull of the scan trigger — even if bar codes are damaged, under several layers of shrinkwrap or on a label that contains multiple bar codes. And when it comes to designing a product that can handle the all day everyday challenging warehouse environment, Motorola excels. Users can drop our scanners on cement or in mud, or smear grease and spill water on these devices, yet still expect all day every day dependable operation.

minimizing the time and cost associated with processing erroneous orders. In the event the imager has a display or is tethered to a vehicle-mount mobile computer, routing instructions can be delivered so the shipment is properly staged for put-away. For example, items that are low in stock or out of stock can be prioritized for immediate put-away. The result? Dock-to-stock time is minimized and inventory is available for use faster. And since many of our imagers allow users to snap a photo, workers can easily capture indisputable proof of condition for any goods that arrive damaged.

PUT-AWAY

Once shipments are staged for put-away, a quick scan verifies that the materials are about to be placed on the right shelf. No more misplaced inventory that could result in unnecessary inventory costs as well as out of stocks that can delay order fulfillment or stop the production line. And in the event that the imager has a display or is tethered to a vehicle-mounted mobile computer, a scan of the bar code on an item staged for put-away can return the fastest route to the right storage destination, further improving productivity in the put-away function.

PACKING

In the packing function, scanning eliminates the need to manually check pick tickets. Now, workers can easily cross check the accuracy of an order by scanning the bar codes on the pick tickets, as well as the bar codes on the actual products. The result is automatic and

error-free validation that the right items were picked for the order. In addition, the proper carton size for each order can be automatically identified based on the items in the order. No longer will workers select a box that's too large, requiring extra filler and packaging material to take up the empty space. By ensuring the right choice of shipping materials, you help both the environment and your bottom line. And since the bar code on shipping materials can also be scanned as they are selected, the real-time inventory information ensures timely re-ordering — the right packing materials are always at hand.

SHIPPING

Before a worker places a shipment in a truck for delivery, a quick scan of the bar code on an outgoing shipment helps ensure that the right items are being shipped to the right address and staged for the right truck — in the right order. Wireless connectivity enables instant printing of all required paperwork on either a printer connected to the wireless LAN or via a direct connection to a Bluetooth-enabled printer. The same number of workers can now get more orders out each day, ensuring that promised delivery times are met. Since errors are virtually eradicated from this function, there are no more costly mis-ships, missed delivery dates or disappointed customers. And since shipments inside trucks are now staged in the order in which they will be delivered, drivers spend less time at each stop. Now, you can make more deliveries per day — without adding drivers or purchasing additional delivery vehicles.

EVERYTHING YOU NEED TO IMPLEMENT NEXT-GENERATION WAREHOUSE AUTOMATION

Motorola has everything you need to take your warehouse to the next level of automation, so deployment is smooth, fast and cost effective. We offer a complete array of mobile devices for the warehouse — from bar code scanners to vehicle-mounted computers for forklifts and other material handling equipment and hands-free wearable computers. Our complete line of wireless LAN equipment can enable data capture throughout every inch of your indoor and outdoor warehouse. Our wireless broadband network solutions can easily and cost-effectively connect your warehouses. Our full complement of services can help with any phase of your solution, from planning to deployment. And Service from the Start with Comprehensive Coverage is a unique support plan that sets the standard for post-deployment support covering normal wear and tear as well as accidental damage to your Motorola devices.

Wireless freedom for fast and easy data capture in every inch of your warehouse. Wireless models that connect to a host via either Bluetooth or your wireless LAN give your workers true anywhere anytime bar code scanning. Now, workers can capture data in the back of a truck or out on the middle of the warehouse floor for faster and more accurate processing of inventory.

Unique hybrid models with advanced data functionality for improved productivity and accuracy. Motorola's MT2000 Series offers the industry's first device that marries the simplicity of gun-style scanning with the brainpower of a mobile computer. The result? You can give your workers a new level of information and new data entry features that will help take your warehouse processes to the next level of automation.

EMPOWER YOUR WAREHOUSE WITH THE
NEXT GENERATION IN BAR CODE SCANNING.

To find out how, please visit us on the web at www.motorolasolutions.com/barcodescanning/rugged or access our global contact directory at www.motorolasolutions.com/contactus

THE MOTOROLA RUGGED WAREHOUSE IMAGER PORTFOLIO

	DS3508-SR	DS3578-SR	DS3508-ER	DS3578-ER	DS3508-HD	DS3578-HD	DS3508-DP	DS3578-DP	MT2070	MT2090
GENERAL DESCRIPTION										
Device highlights	Standard-range scanners built for general purpose use		Offers maximum scanning range to support end-to-end warehouse processes – from near contact to the highest rack in the warehouse		Optimized to capture the very dense 2D bar codes used in the manufacturing of small parts, such as electronics, medical equipment and microchips		Optimized for any type of DPM code on any surface, including dot peen, laser etch, chemical etch, inkjet, mold, cast and thermal spray marks on metal, black rubber, plastic or glass		Unique design that marries the simplicity of a bar code scanner, the brainpower of a mobile computer complete with display, plus wireless LAN connectivity	
DESIGNED FOR…										
Corded	•		•		•		•		•	•
Cordless (Bluetooth)		•		•		•		•	•	•
Wireless (802.11a/b/g)										•
Display and Keypad									•	•
Scanning Range	Near contact to 20.9 in./ 53.09 cm	Near contact to 20.9 in./ 53.09 cm	Near contact to 30 ft./ 9.14 m	Near contact to 30 ft./ 9.14 m	Near contact to 9.2 in./ 23.37 cm	Near contact to 9.2 in./ 23.37 cm	Near contact to 9.2 in./ 23.37 cm	Near contact to 9.2 in./ 23.37 cm	1 in. to 16 ft./ 2.54 cm to 4.88 m	1 in. to 16 ft./ 2.54 cm to 4.88 m
DATA CAPTURE										
1D/2D	•	•	•	•	•	•	•	•	•	•
2D High Density					•	•	•	•	• (optional)	• (optional)
IUID							•	•		
DPM marks							•	•	• (optional)	• (optional)
Images	•	•		•	•	•			•	•
MOTOROLA MAX RUGGED										
Drop Spec.	6.5 ft./ 2m to concrete	6.5 ft./ 2m to concrete	6.5 ft./ 2m to concrete	6.5 ft./ 2m to concrete	6.5 ft./ 2m to concrete	6.5 ft./ 2m to concrete	6.5 ft./ 2m to concrete	6.5 ft./ 2m to concrete	6 ft./ 1.8m	6 ft./ 1.8m
Sealing	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP54	IP54
OTHER										
Remote Management	RSM	RSM	RSM	RSM	RSM	RSM	RSM	RSM	MSP	MSP
FIPS 140-2 validated		•		•		•		•	•	•

BUILT TO THRIVE IN THE HARSH WAREHOUSE ENVIRONMENT, THIS RUGGED PORTFOLIO DELIVERS:

COMPREHENSIVE DATA CAPTURE
Choose one model to meet all the data capture needs in your warehouse — from 1D and 2D bar codes to IUID codes and direct part marks (DPM). You'll have fewer models to purchase and support, helping drive down the cost of doing business.

SUPERIOR SCANNING PERFORMANCE
Your workers will experience blazing performance on virtually every bar code — including damaged and poor quality codes, codes under multiple layers of shrinkwrap and even the most challenging direct part marks. Exceptional motion tolerance combines with omni-directional scanning, so workers don't need to pause between scans or align bar code and scanner. Workers can scan in virtually any lighting condition — in near darkness or bright sunlight — without any impact on read speed.

MOTOROLA'S SIGNATURE RUGGED DESIGN
Our handheld scanners are built for the tough warehouse environment, able to perform reliably whether they are dropped on a concrete floor; used outdoors in driving rain, snow, summer heat or extreme winter cold; or exposed to dust and frequent wipedowns.

ALL DAY COMFORT
Leveraging our deep expertise in industrial design, our handheld scanners feature an ultra-ergonomic forward-scanning pistol grip that balances easily in the hand, bringing all day comfort to all day scanning.

FLEXIBLE DEPLOYMENT MODES
Comprehensive connectivity options provide the flexibility to easily meet application requirements throughout any warehouse environment. Choose wireless or corded models that can be used as standalone devices or easily tethered to a vehicle-mounted mobile computer.

EASY TO MANAGE
Rich remote management capabilities dramatically reduce the time, cost and logistical headaches associated with scanner configuration and day-to-day management.

MOTOROLA