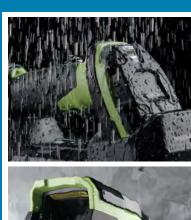


## Zebra 3600 Ultra-Rugged Handheld Scanners Selling Guide











#### INTRODUCING THE ZEBRA 3600 ULTRA-RUGGED SERIES, A NEW CLASS OF SCANNER DESIGNED TO WORK IN YOUR CUSTOMER'S TOUGHEST CONDITIONS

In manufacturing plants, warehouse aisles, outdoor yards and seaports, the success of your customer's business rests heavily on the scanners in the hands of their workers. The quality of their products and their ability to deliver the right products to the right destination on time is heavily dependent upon the fast and accurate capture of many barcodes throughout the day.

Wait times between scans, barcodes that can't be read and downtime when a scanner fails create unacceptable delays. Every minute lost reduces productivity, potentially impacting labor costs, order delivery times, profitability, service levels and sales. Your warehouse and manufacturing customers need technology that they can count on, every minute of the day.

Introducing the Zebra 3600 Ultra-Rugged Series — a new class of handheld scanner built to deliver the unstoppable performance your customers need in their most demanding business environments.

The 3600 Series delivers:

Superior scanning performance on virtually any barcode in practically any condition — period.

An ultra-rugged design for unprecedented durability in ultra-challenging environments.

Unrivaled management tools that reduce management time and costs to a new low.

Twelve corded or cordless models that can scan nearer and farther than their competition.



## **INTRODUCING ZEBRA'S 3600 ULTRA-RUGGED HANDHELD SCANNERS:**

**TWELVE CORDED AND CORDLESS MODELS LET YOU PRESENT THE SCANNER THAT WILL MAXIMIZE WORKER** PRODUCTIVITY IN EACH **OF YOUR CUSTOMER'S APPLICATIONS** 

Ideal for shipping and receiving on the loading docks, small item pick and pack, plus manufacturing work-in-process.

#### DS3608-HD CORDED/DS3678-HD CORDLESS 1D/2D High Density Barcodes

Designed to capture high-density 1D/2D barcodes including tiny dense codes that are barely visible to the naked eye.

Ideal for protecting product quality on the electronics and medical equipment production line — ensures workers use the right product components at the right time, every time.

#### DS3608-HP CORDED/DS3678-HP CORDLESS 1D/2D High Performance for Barcodes and More

Designed for mid-range reading of 1D/2D barcodes 40 percent farther than the DS36x8-SR/DS3678-SR — up to 7 ft./2.1 m away — with the flexibility to capture photos, documents, signatures and OCR.

Ideal on the loading docks for fast processing of incoming/outgoing shipments — from reading shipment labels for instant reconciliation to capturing signatures for proof of delivery and photos for proof of condition.

#### LI3608 CORDED/LI3678 CORDLESS 1D Linear Imager

Designed for near-range reading of 1D barcodes.

Ideal for shipping and receiving on the loading docks, small item pick and pack and manufacturing work-in-process.

#### DS3608-DP CORDED/DS3678-DP CORDLESS 1D/2D Direct Part Marks

Designed to capture virtually every type of direct part mark (DPM) and 1D/2D barcode.

Ideal for track and trace, maintenance, warranty service and product authentication on the industrial manufacturing production line.

#### DS3608-ER CORDED/DS3678-ER CORDLESS 1D/2D Extended Range Scanning

Designed to capture standard and extra-wide 1D/2D barcodes over an industry-leading extraordinary range — from 3 in. to 70 ft. — 35 percent farther and 60 percent closer than competitive models.

Ideal in warehouses and ports, where workers need to capture small to very wide barcodes on items at close range as well as items on upper warehouse shelves or stacked containers in a rail yard or port.







## Why do we call the 3600 Series Ultra-Rugged?

The 3600 Series redefines what it means to be rugged. We call it ultra-rugged. All models boast the industry's highest drop spec and IP ratings, making them virtually indestructible even in the most unforgiving environments. What does this mean for your customers? They get the peace of mind that their scanners will continue to perform at peak levels even when dropped from a forklift to cement, exposed to the dust and dirt of a warehouse, and used out in the rain and snow. The 3600 Series was built from the ground up to not just withstand these punishing conditions, but to excel in them.

#### The highest drop specification for any rugged scanner

Today's warehouses often utilize all the vertical space they have. This means that the potential for longer drops is very real. Drops to concrete from a forklift or lift operator occur on a regular basis, often times while reaching high overhead to scan a stacked pallet. That's why we engineered the 3600 Series to survive 8 ft./2.4 m drops to concrete — 23 percent more durable than competitive devices.

#### The highest tumble specification for any rugged scanner

The 3600 Series works even after 5,000 consecutive tumbles, ensuring reliable operation after the real-world tumbling that typically follows a drop.

#### **Dustproof, sprayproof and waterproof**

The 3600 Series are the only scanners with two sealing ratings — IP65 and IP67 — and the only scanner to offer IP67. The result is a scanner that is 100 percent dustproof, can handle the force of jetting water and can survive 30 minutes fully submerged in water.

## **Built for blazing heat and sub-zero temperatures** in freezers and outdoor yards

Built to withstand extreme heat, cold and humidity, our corded and cordless models can be used anywhere — indoor, outdoor and even in the freezer. This means that your customer can purchase the same device for multiple environments and applications. \*Heated scanner holder accessory required for use in freezers.

#### The most rugged cradle in the industry

Cordless 3600 models feature a rugged cradle with IP65 sealing, the same extreme temperature rating as the scanner, plus industrial charging contacts that can last 250,000 insertions. These cradles are suitable for outdoor environments and can be washed down at the end of each shift.

...industrial strength for your customer's most challenging environments.







## Superior scanning performance — period

We've packed the 3600 Series with our most advanced scanning technology. The result? You can offer your customers the ideal scanning experience: one aim, one trigger pull, one beep. All 3600 models can scan faster and farther than other scanners in their category with productivity enhancing features that set them apart from the competition.

#### Capture any barcode in any condition

The warehouse and manufacturing plant are tough on printed barcodes. With the 3600 Series, your customers get the integrated scanning intelligence that has made our barcode technology the industry leader. Virtually any barcode can be captured in virtually any condition — scratched, dirty, poorly printed and even under shrinkwrap or frost. The result? First-time every time scanning eliminating the everyday exceptions that drive time and cost into your customer's business.

#### PRZM Intelligent Imaging Technology

Unique to Zebra, PRZM resets the bar for 2D imaging by improving time decode and time to recover performance, dramatically improving the user experience, throughput and wait times. \*2D Imager models only.

#### The widest working range in their class

If a scanner doesn't scan with a wide working range, or if time to decode increases as the depth of field increases, a worker must move closer to or farther away from the barcode. The 3600 Series enables workers to scan just as accurately and quickly both near and far, across the entire working range of the device. \*Working range varies by model.

## Capture up to 20 barcodes with a single press of the trigger

Our powerful time-saving Multi-code feature is perfect for those labels that contain many barcodes. Your customers specify which codes are captured, the order in which codes will be captured and how to format each code for their back-end application. One press of the scan trigger captures and transmits the data instantly to the right fields in the right applications — and the opportunity to scan the wrong codes on labels is eliminated.

#### Superior pick-list functionality

Pick lists are often a part of the workday in the warehouse and manufacturing plant. That's why the 3600 Series scanners include aiming technology that makes it easy for workers to select and scan even small barcodes.

#### **Capture printed and electronic barcodes**

All models can capture barcodes that are printed or displayed on any computer screen. Even if your customers don't use electronic barcodes today, they're ready for the future.



## Unrivaled manageability across the enterprise

Managing scanners can be time-consuming and costly. That's why the 3600 Series comes with a set of complimentary tools that take the complexity out of end-to-end scanner management. Whether your customer's scanners are in one location, across the country or around the world, we make staging, updating and everyday troubleshooting easy. The result? The overall total cost of ownership (TCO) for your customer's mobility solution is reduced.

#### Easy configuration with 123Scan<sup>2</sup>

Staging and updating 3600 Series scanners is easy with 123Scan². Scanners are automatically detected and the two-way communication required for staging is automatically established in seconds — an industry first. With this patented wizard-driven tool, your customers can create and distribute configuration files or barcodes to simplify staging and updating. They can update firmware and parameters without losing their settings — another industry first. And with comprehensive activity and inventory reports, your customers can easily verify that every parameter is properly configured on every scanner.

## Easy remote management with Scanner Management Service (SMS)

SMS lets your customers customize scanner parameters and update firmware remotely — no depot staging, user action, barcode scanning or management console required. The easy-to-use wizard-based tool works on any off-the-shelf enterprise console, allowing your customers to create and send an SMS Package to all of their PC scanner hosts that will automatically run when the scanner is plugged in, providing true set-it-and-forget-it staging and updating. And the rich

reporting function allows customers to access a wide range of statistics on all of their scanners at any time — including model and serial number, firmware version and parameter values.

## A wealth of battery metrics for better battery management

Our cordless models offer superior battery management with Zebra's PowerPrecision+ batteries. Now, your customers have the visibility into highly detailed real-time battery metrics they need to maximize useful battery life and ensure every battery in their battery pool is healthy and able to hold a full charge. Advanced State of Health information utilizes the battery's internal gas gauge to track and store battery performance and capacity degradation — data that enables a highly accurate end-of-life prediction. Advanced State of Charge statistics utilize the current charge and present real-time usage patterns to more accurately predict remaining battery power, preventing the loss of battery power during a shift. In addition, your customers can also access a wide range of statistics to help them better manage the battery pool, such as total charge accumulation.



## Set workers free with the industry's most superior cordless technology

Our Bluetooth models are loaded with industry-leading features that make it easier than ever for your customers to use and manage their cordless scanners.

#### Bluetooth 4.0 for lightning fast data capture

With the latest version of Bluetooth — Bluetooth Low Energy (BLE), also known as Bluetooth 4.0 — your customers get fast wireless communications and maximum energy efficiency. No sacrificing performance or battery life for cordless freedom.

## Rugged 'go anywhere' cradle for a complete solution

Cordless rugged scanners are only as good as the cradle they come with. That's why the 3600 Series cradles have the same IP65 sealing and extreme temperature rating as the scanner.

## Deploy Bluetooth with zero Wi-Fi network interference — guaranteed

Bluetooth devices can often create interference in Wi-Fi environments, disrupting workflows and impacting crucial data streams from production line equipment. Zebra's Wi-Fi Friendly mode ensures that our 3600 Series Bluetooth models will not interfere with your customer's Wi-Fi infrastructure. Refer to Appendix H for more details on how Wi-Fi Friendly mode works.

#### **Easy Bluetooth troubleshooting**

With a Bluetooth status LED right on the scanner, it's easy for users to check and restore lost connectivity, minimizing calls to the help desk.

#### Battery power for up to 70,000 scans or more

With more than 50 percent more battery capacity than competitive models, even in the most scan intensive jobs, workers will have plenty of power for a full shift.

## PowerPrecision+ battery — superior battery technology

What makes our batteries better? We start with premium high-grade cells that have a higher capacity, providing longer life cycles than the typical competitive battery. A strong robust housing increases durability, while a design that helps prevent overcharging and electrical shock improves safety. In addition, PowerPrecision+ batteries provide a wealth of real-time battery metrics, including battery performance and capacity degradation, for better battery management.

#### First in its class battery charge gauge

The onboard battery charge gauge is similar to that of a mobile phone, making it easy for users to see if the scanner they pick up at the start of the day has a fully charged battery — and easily monitor battery power throughout the day. The result? No more unexpected dead batteries that impact worker productivity.

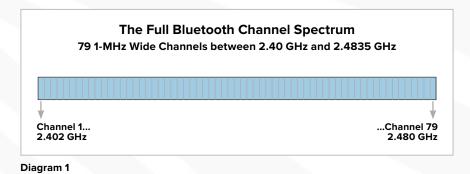
## Deploy 3600 Series Cordless Bluetooth Scanners with ZERO Wi-Fi Interference – Guaranteed

Zebra's Wi-Fi Friendly Mode utilizes Bluetooth's Manual Adaptive Frequency Hopping capability to prevent Bluetooth devices from interfering with mobile devices connected to your customer's Wi-Fi network. With this feature, your customers can deploy any number of 3600 Series Bluetooth scanners to provide workers with the power of cordless freedom — without impacting the quality of the Wi-Fi connection or the performance of the applications running on any Wi-Fi connected handheld, laptop computer, and more. The following charts explain the issue and how Wi-Fi Friendly mode addresses it.

#### The Issue: Overlapping Bluetooth/Wi-Fi Spectrum

The reason Bluetooth devices can interfere with devices connected to the Wi-Fi network is because of overlap in the Bluetooth and Wi-Fi spectrum.

**Bluetooth:** There are 79 channels in the full Bluetooth spectrum (see Diagram 1) — each channel is 1 MHz wide. Bluetooth devices constantly hop around the channels in random order and are supposed to hit every channel while operating (known as Spread Spectrum Frequency Hopping).



**Wi-Fi:** Wi-Fi operates differently. Instead of Bluetooth's 79 channels that are all 1 MHz wide, Wi-Fi operates on channels 1, 6 and 11. Each of these three channels has a center frequency and is approximately 23 MHz wide.

As you can see from Diagram 2, Wi-Fi and Bluetooth share most of the channel spectrum.

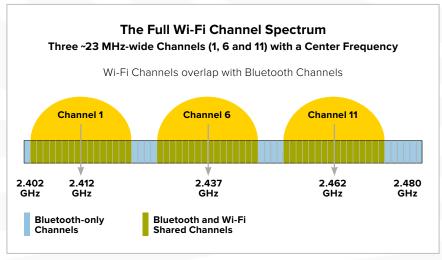


Diagram 2

### The Solution – Wi-Fi Friendly Mode

With Zebra's Wi-Fi Friendly Mode, in the time it takes to scan a barcode, your customers can manually constrain Bluetooth communications to those Bluetooth channels that do not overlap with the Wi-Fi channels currently in use.

#### Why does it work?

Bluetooth's Adaptive Frequency Hopping (found in Bluetooth 2.1 and later) can be implemented automatically or manually. When implemented automatically, all 79 Bluetooth channels are available to all Bluetooth devices. Manual mode can be utilized to constrain Bluetooth devices to specific channels in the Bluetooth spectrum.

#### The result?

Wi-Fi and Bluetooth devices operate on separate channels, effectively eliminating Bluetooth interference on the Wi-Fi network (see Diagram 3).

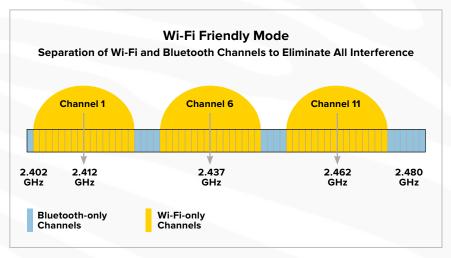


Diagram 3

## Additional Bluetooth features Zebra uses to minimize interference

- Bluetooth 4.0: Adaptive Power Control — Reduces power to the minimum required to maintain the Bluetooth Link.
- User Defined Max Power Setting —
   Enables manual configuration of the transmit maximum power level.
- Limited Page Requests —

When a scanner is out of range or if the cradle has been unplugged, the scanner only pages the cradle for seconds. After that, paging begins when the scanner is triggered or inserted into the cradle. While the Bluetooth specification supports this feature, Zebra modifications control the timing and enable easy implementation.

#### **Easy Split-Second Deployment**

Out of the box, all 3600 Series models are configured with automatic Adaptive Frequency Hopping for Bluetooth. In order to implement Bluetooth Friendly mode, your customers just need to identify the Wi-Fi channels in use and scan the appropriate barcode. If the Wi-Fi channels change down the road, updating the configuration of Wi-Fi Friendly Mode is as simple as scanning the correct barcode.

Seven barcodes are provided in the 3600 Series Users Manuals to cover every possible combination of Wi-Fi channels:

- Channel 1
- 2. Channel 6
- 3. Channel 11
- 4. Channel 1, 6 and 11
- 5. Channel 1,6
- 6. Channel 1, 11
- 7. Channel 6, 11

In Diagram 3 above, barcode #4 has been scanned to eliminate interference on all three Wi-Fi Channels (1, 6 and 11).

## **Vertical Markets**The 3600 Series in Warehousing

Whether workers are in the warehouse aisles, out on the dock, in the freezer or in an outdoor yard, the 3600 Series delivers a unique set of features for unmatched durability, scanning performance and manageability.



#### **Applications**

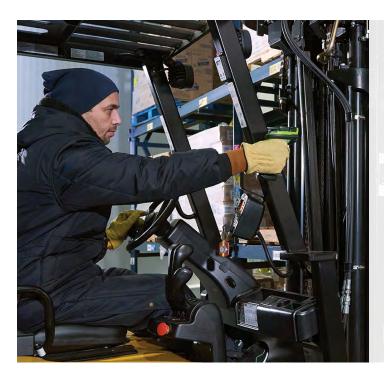
- Receiving and putaway
- Inventory and materials management: cycle counting, replenishment
- · Picking
- Shipping
- · Cross-docking
- Reverse Logistics (processing of goods that are returned)
- Yard Management

- · LI36x8: 1D applications only
- DS36x8-SR: Standard range 1D/2D
- DS36x8-HP: 1D/2D, OCR, images, signatures, documents
- DS36x8-ER: Extended range 1D/2D

	Key Differentiating Features in Warehousing Opportunities				
Feature	Customer Benefit				
Dustproof, sprayproof and waterproof	The 3600 Series is the only device in its class with a waterproof IP67 sealing rating, and the only scanner family to offer a second rating of IP65. It's ready for virtually every challenging warehouse environment, from dusty aisles and outdoor yards to pouring rain out on the loading dock, spilled coffee and spray downs with a high-pressure hose.				
Cradle with IP65 sealing	We sealed our Bluetooth cradle to IP65 to match the scanners, creating the only complete rugged cordless solution for your customer's forklift and other material handling equipment drivers.				
Built to handle drops to the concrete floor	Many device failures in the warehouse occur when the device is dropped on the concrete floor. That's why all models in the 3600 Series offer a best-in-class 8 ft./2.4 m drop to concrete impact rating — 23 percent more durable than any other scanner in this class.				
Scan nearer and farther with one device	With expanded working ranges in every model in the 3600 Series, workers can stay in one spot and capture more barcodes. All models offer 30 percent more working range than competitive devices.				
Industry-leading extended range model	For workers that need maximum range, our extended range scanner can capture extra-wide barcodes just a hands-length away, as well as barcodes on the uppermost warehouse shelves up to 70 ft./21 m away, for an untouchable range that is 60 percent closer and 35 percent farther than the competition.				
First-time capture of imperfect barcodes	Barcodes that can't be scanned instantly lower productivity levels. But even the most damaged barcodes are no match for our advanced scanning algorithms — whether barcodes are torn, dirty, smudged, poorly printed or under a layer of frost, workers can capture it all with one press of the scan trigger.				
Multi-code feature	Many labels in the warehouse contain multiple bar codes — and with our Multi-code feature (available on 3600 Series imagers), workers can capture up to 20 barcodes in the time it takes to press the scan trigger.				

## **Vertical Markets The 3600 Series in Cold Storage**

Engineered to provide reliable operation even with dramatic temperature swings, the 3600 Series will extend high performance scanning to your customers' coldest and most challenging areas.



#### **Applications**

- · Receiving and putaway
- Inventory and materials management: cycle counting, replenishment
- Picking
- Shipping
- Cross-docking
- Reverse Logistics (processing of goods that are returned)
- Yard Management

- LI36x8: 1D applications only
- DS36x8-SR: Standard range 1D/2D
- DS36x8-HP: 1D/2D, OCR, images, signatures, documents
- DS36x8-ER: Extended range 1D/2D

	Key Differentiating Features in Cold Storage Opportunities				
Feature	Customer Benefit				
Sub-zero temperature rating	Scanners need to withstand extreme cold and heat — that's why we engineered the 3600 Series with an extreme working temperature range: $-22^{\circ}$ F to $122^{\circ}$ F / $-30^{\circ}$ C to $50^{\circ}$ C (corded) and $-4^{\circ}$ F to $122^{\circ}$ F / $-20^{\circ}$ C to $50^{\circ}$ C (cordless). Unique plastics, cables and components are designed to handle freezing temperatures without becoming brittle.				
A battery that's rated for the freezer	Battery performance often erodes as the temperature drops, but our unique PowerPrecision+ battery is rated for the freezer, with zero performance degradation at -4° F/-20° C. Your customers can give their workers the freedom of wireless in the freezer, without worrying about battery and reliability issues.				
Heated scanner holder to avoid condensation	If workers frequently travel in and out of the freezer, the heated scanner holder keeps the scanner head warm to prevent the buildup of condensation on the scanner head. Performance is still unstoppable — in spite of constant temperature shocks.				
Freezer-rated cables	Unlike many other rugged devices on the market, the 3600 Series offers cables with special jacketing to maintain flexibility in subzero temperatures, preventing costly cable failure and work interruptions.				
Maximum scanning speed on every type of barcode	Whether workers are scanning 1D or 2D barcodes, they get an advanced scan engine optimized to provide maximum scanning speed. This boosts productivity, and ensures that workers aren't spending more time than needed in the freezer, improving both their comfort and safety.				
First-time capture of imperfect barcodes, including frosted barcodes	Cold storage is a tough place for a barcode label. And barcodes that can't be scanned instantly lower productivity levels. But even the most damaged barcodes are no match for our advanced scanning algorithms — whether barcodes are torn, dirty, smudged, poorly printed or under a layer of frost, workers can capture it all with one press of the scan trigger.				
Ergonomics for the freezer	The 3600 Series features an oversized scan trigger to make scanning easy even with the thickest gloves. A user-controllable, extra-loud beeper volume, combined with vibration feedback, ensures that workers instantly know a scan was successful — no matter how loud the environment might be.				

## Vertical Markets The 3600 Series in Outdoor Yards and Ports

The 3600 Series delivers the technology and performance your customers need to achieve a new level of success in their outdoor environments.



#### **Applications**

- Receiving and putaway
- Inventory and materials management: cycle counting, replenishment
- Picking
- Shipping
- Cross-docking
- Reverse Logistics (processing of goods that are returned)
- Yard Management

- LI36x8: 1D applications only
- DS36x8-SR: Standard range 1D/2D
- DS36x8-HP: 1D/2D, OCR, images, signatures, documents
- DS36x8-ER: Extended range 1D/2D

	Key Differentiating Features in Outdoor Yard and Port Opportunities				
Feature	Customer Benefit				
Dustproof, sprayproof and waterproof	The 3600 Series is the only device in its class with a waterproof IP67 sealing rating, and the only scanner family to offer a econd rating of IP65. It's ready for virtually every challenging outdoor environment, from puddles and mud to pouring rain, pilled coffee and spray downs with a high-pressure hose.				
Cradle with IP65 sealing	We sealed our Bluetooth cradle to IP65 to match the scanners, creating the only complete rugged cordless solution for your customer's forklift and other material handling equipment drivers.				
Built to handle drops to the concrete floor	any device failures occur when the device is dropped on the concrete at an airport or seaport tarmac. That's why all odels in the 3600 Series offer a best-in-class 8 ft./2.4 m drop to concrete impact rating — 23 percent more durable than by other scanner in this class.				
Extreme temperature range	Scanners need to be able to handle life outdoors in all four seasons — the 3600 Series offers an extreme working emperature range: -22° F to 122° F /-30° C to 50° C (corded) and -4° F to 122° F /-20° C to 50° C (cordless).				
Scan nearer and farther with one device	With expanded working ranges in every model in the 3600 Series, workers can stay in one spot and capture more barcodes.  All models offer 30 percent more working range than competitive devices.				
Industry-leading extended range model	For workers that need maximum range, our extended range scanner can capture extra-wide barcodes just a hands-length away, as well as barcodes on the uppermost warehouse shelves up to 70 ft./21 m away, for an untouchable range that is 60 percent closer and 35 percent farther than the competition.				
First-time capture of imperfect barcodes	Barcodes that can't be scanned instantly lower productivity levels. But even the most damaged barcodes are no match for our advanced scanning algorithms — whether barcodes are torn, dirty, smudged, poorly printed or under a layer of frost, workers can capture it all with one press of the scan trigger.				
Easy aiming, even in bright sunlight	Every model offers the superior aiming technology your workers need to capture any size barcode at any length, in any lighting condition, from the bright noon sun to the haze and fog that are common at seaports.				

## **Vertical Markets** The 3600 Series in Manufacturing

Whether your customers are manufacturing vehicle cam shafts, computer circuit boards or whole-grain bread, their operations will benefit from the unmatched durability, scanning performance and manageability of the 3600 Series.



#### **Applications**

- Traceability
- Quality Assurance
- Inventory and materials management: cycle counting, replenishment
- Picking
- Shipping

- LI36x8: 1D applications only
- DS36x8-SR: Standard range 1D/2D
- DS36x8-HP: 1D/2D, OCR, images, signatures, documents
- DS36x8-DP: 12/2D, direct part marks for track and trace in industrial manufacturing
- DS36x8-HD: 1D/2D, tiny dense codes that are common in electronics and medical equipment

	Key Differentiating Features in Manufacturing Opportunities				
Feature	Customer Benefit				
Dustproof, sprayproof and waterproof	The 3600 Series is the only device in its class with a waterproof IP67 sealing rating, and the only scanner family to offer a second rating of IP65. It's ready for virtually every challenging manufacturing plant environment, from dusty aisles and outdoor yards to pouring rain out on the loading dock, spilled coffee and spray downs with a high-pressure hose.				
Cradle with IP65 sealing	We sealed our Bluetooth cradle to IP65 to match the scanners, creating the only complete rugged cordless solution for your customer's forklift and other material handling equipment drivers.				
Built to handle drops to the concrete floor	Many device failures in manufacturing occur when the device is dropped on the concrete floor. That's why all models in the 3600 Series offer a best-in-class 8 ft./2.4 m drop to concrete impact rating — 23 percent more durable than any other scanner in this class.				
Peak productivity for track and trace applications	The 3600 Series can capture literally every type of DPM code, regardless of size, surface, contrast or density — including depen, laser etch, ink mark, chemical etch, inkjet mold, cast and thermal spray. Advanced illumination technology provides the multiple lighting effects required to capture marks on any type of surface, even challenging marks such as low contrast codes on a black surface, marks on a very shiny surface or codes on corroded steel.				
Capture 1D/2D and DPM with one device	If your customers need to capture direct part marks, our DPM model offers exceptional versatility, with the ability to captur 1D/2D bar codes, direct part marks and images in a single device. Instead of purchasing multiple scanners for specialized roles, they can deploy the same scanner to use on the production line for end-to-end track and trace of materials, for receiving applications in the warehouse and to track tools in the storeroom.				
Bluetooth with Wi-Fi Friendly mode	Bluetooth devices can often create interference in Wi-Fi environments, disrupting workflows and impacting crucial data streams from nearby production line equipment. Now, your customers can just scan a single barcode to configure their cordless 3600 Bluetooth scanners with Zebra's Wi-Fi Friendly mode, which completely eliminates any interference with their Wi-Fi infrastructure — guaranteed.				

## **Market Opportunity**

#### **GLOBAL PROJECTIONS**

#### **Global Projections for Handheld Scanners**

Market research firm VDC expects that the overall handheld scanner market will grow to \$1.2B by 2019, at a relatively modest 4% CAGR. However, these overall numbers are driven by a decrease in laser shipments and modest growth in linear imagers. As shown in the chart below, 2D imagers will continue to see strong growth, at more than 9% CAGR over this period. VDC believes that camera-based imagers will account for more than 65% of overall handheld scanning revenues by 2019, up from 52% in 2014. Yet while Tier 1 and Tier 2 companies have adopted 2D imagers, many customers in emerging markets will remain proponents of linear 1D barcode scanning.

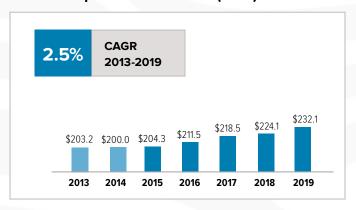
#### HANDHELD 2D IMAGERS: 2013-2019

Global Shipments in Millions (USD)



#### **HANDHELD LINEAR IMAGERS: 2013-2019**

Global Shipments in Millions (USD)



Source: VDC Research, The Global Market for Handheld Barcode Scanners, 2015

## The 2D Opportunity

According to VDC, many factors contribute to the high growth predictions for the imager market, including enterprises' need to future-proof technology investments, capture images (such as damaged goods documentation or for QA/QC), decode information present on different barcode symbologies and support applications beyond traditional track-and-trace.

## ...the 3600 Series helps your customers meet these needs...

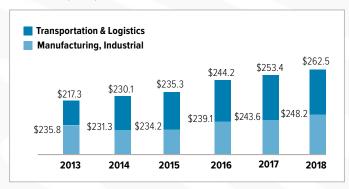
The series offers futureproof scan performance, rugged design and application versatility. With the ability to capture images (HP model), advanced imaging technology and industryleading read ranges, your customers can get more done with the 3600 Series.

## **Market Opportunity**

#### **VERTICAL AND REGIONAL PROJECTIONS**

Sales of handheld barcode scanners are growing in the 3600 Series' key markets: T&L and Industrial/Manufacturing

### Global shipments of handheld barcode scanners in Millions (USD)



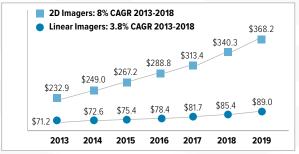
Source: VDC Research, The Global Market for Handheld Barcode Scanners, 2015

A primary grievance among logistics service providers about their current barcode scanners is low read rates...

This provides an excellent opportunity to upgrade customers to the 3600 Series, With its advanced scanning technology, the 3600 Series captures barcodes as fast as users can press the trigger.

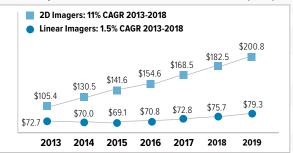
#### Market Projections by Regions: 2D Imagers and Linear Imagers

THE AMERICAS: Shipments of handheld scanners in Millions (USD)



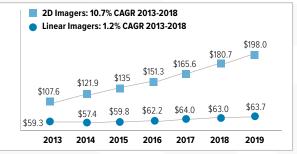
Source: VDC Research, The Global Market for Handheld Barcode Scanners, 2015

EMEA: Shipments of handheld scanners in Millions (USD)



Source: VDC Research, The Global Market for Handheld Barcode Scanners, 2015

#### APAC: Shipments of handheld scanners in Millions (USD)



Source: VDC Research, The Global Market for Handheld Barcode Scanners, 2015













### **Sales Tools:**

#### **EVERYTHING YOU NEED TO SELL THE 3600 SERIES**

#### POSTED ON THE SOURCE/PARTNER CENTRAL

http://zebra.gosavo.com https://partnerportal.zebra.com

#### **Zebra Services:**

www.zebra.com/services

#### **Learning Portal:**

www.zebra.com/training

#### **Solution Builder:**

https://solutionbuilder.zebra.com

#### **Developer Tools:**

https://developer.zebra.com

#### 3600 Series Selling Guide

This comprehensive document contains all the information you need to sell the ultra rugged 3600 Series.

#### 3600 Series Battlecards

These two-page battlecards provide a quick at-a-glance look at features and benefits, applications, competition and available support services; battlecards are available for each of the six models.

#### **3600 Series Product Descriptions**

Short, medium and long product descriptions to use in proposals, emails and other marketing materials.

#### **ZEBRA'S GRAPHICS LIBRARY**

#### **Product and application photos:**

http://medialibrary.zebra.com

#### **PUBLIC FACING ASSETS**

#### **3600 Series Specification Sheets**

These two-page documents discuss the key features of the 3600 Series models, along with product specifications. Spec sheets are available for each of the six models.

#### **3600 Series Product Brochure**

Provides a high-level overview of the entire 3600 Series, including its key features and benefits.

#### **3600 Series Application Briefs**

Four different application briefs are available, discussing the key benefits of the 3600 Series in each target market: Warehousing, Manufacturing, Cold Storage, and Outdoor Yards and Ports.

#### **KEY DATES**

Public Announcement: April 4, 2016

#### **General Availability:**

LI3608/LI3678: April 2016

DS3608-SR: April 2016

DS3608-HP: April 2016

DS3678-SR: July 2016

DS3678-HP: July 2016

DS3678-HD: July 2016

DS3608-ER/DS3678-ER: September 2016

DS3608-DP/DS3678-DP: December 2016

### Sales Tools:

#### YOUR INVESTMENT, PRODUCT CLASS AND TRAINING

#### **PRODUCT CLASS**

The 3600 Series scanners are Class 3 products. Partners that meet this segmentation designation have authorization to sell the device. While training and certification are not required, free online training is available online along with additional marketing collateral to support your 3600 Series sales opportunities.

#### YOUR INVESTMENT

How much of an investment do you need to make to sell the 3600 Series?

#### **ZEBRA SALES TOOLS: \$0**

No cost — see Sales Tools section for list of available complimentary collateral, including collateral that can be customized with your company name, logo and contact information.

#### **CERTIFICATION COSTS: \$0**

Certification not required.

#### **TRAINING**



#### Course Code: BSRUG-001 **Course Title: Product Overview** for the Ultra-Rugged 3600 Series

This course is designed to provide sales personnel a sales overview and technical personnel a technical overview of the 3600 Series Ultra-rugged scanner. The course defines key features, positioning, benefits, capabilities, and target applications. Major sales concepts covered include: "What Business Problems are Solved", "Key Selling Points", "ROI and TCO", "Service and Support Options" and how to "Differentiate" this product from our competition.

By the end of the course, you will be able to:

- Describe the 3600 Series positioning statement
- · Understand where the 3600 Series fits into the portfolio
- Describe 3600 Series portfolio capabilities
- Compare the total cost of ownership
- · Ask questions that identify customer needs
- Match the customer with the appropriate solution

### DS3608-SR/DS3678-SR



WHEN YOUR CUSTOMERS **NEED UNSTOPPABLE PERFORMANCE FOR 1D AND 2D BARCODES** AT STANDARD RANGES,

## **ZEBRA'S 3600-SR SERIES DELIVERS.**

Applications for the DS3608-SR and DS3678-SR include:

Shipping and receiving at dock doors

Small item pick and pack

Manufacturing work-in-process (WIP)



# Top 15 Competitive Advantages for the DS3608-SR/DS3678-SR



#### **UNMATCHED DEVICE PERFORMANCE**

- Unparalleled scanning performance
- 50% greater working range than other devices in its class
- Only device to offer Bluetooth 4.0
- Only device to offer Wi-Fi Friendly Mode
- Double the battery power up to 70,000 scans per charge

#### **INDUSTRY-LEADING RUGGED DESIGN**

- Only device to offer an 8 ft./2.4 m drop spec
- Only device to offer a double sealing rating: IP65 and IP67
- Only device with a rugged cradle
- Only device with freezer compliant cables

#### **EASIER FOR WORKERS TO USE**

- Only device to offer a battery charge gauge
- Only device to offer a Bluetooth status LED
- Capture up to 20 barcodes simultaneously

#### **EASIER TO MANAGE**

- Detailed battery metrics for superior battery management
- Industry-best free management tools

## **DS36x8-SR Specifications**

Physical Charac	cteristics		
Dimensions	Corded: 7.3 in. H x 3.0 in. W x 5.2 in. D 18.5 cm H x 7.6 cm W x 13.2 cm D Cordless: 7.3 in. H x 3.0 in. W x 5.6 in. D 18.5 cm H x 7.6 cm W x 14.2 cm D		
Weight	Corded: 10.8 oz./305 g; Cordless: 14.4 oz./407 g		
Input Voltage Range	Host powered: 4.5 VDC min., 5.5 VDC max. External power supply: 11.4 VDC min., 12.6 VDC max.		
Operating Current	DS3608-SR (corded): 340 mA (typical)		
Standby Current	DS3608-SR (corded): 100 mA (typical)		
Color	Industrial Green		
Supported Host Interfaces	USB, RS232, Keyboard Wedge		
Battery	PowerPrecision+ 3100 mAh Li-Ion rechargeable battery		
User Indicators	Direct decode indicator; LEDs; beeper; vibration		
Performance Cl	naracteristics		
Scans per Full Charge	70,000+		
Illumination	One (1) Hyper Red 660nm LED		
Imager Field of View	Horizontal: 42°, Vertical: 28°		
Image Sensor	1,280 x 800 pixels		
Minimum Print Contrast	15% minimum reflective difference		
Skew/Pitch/Roll	Skew: ± 60°; Pitch: ± 60°; Roll: ± 360°		
Decode Capabi	lities***		
1D	Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma)		
2D	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Chinese Sensible (Han Xin), Postal Codes		
User Environme	ent		
Operating Temp.	Corded: -22° F to 122° F/-30° C to 50° C Cordless: -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% condensing		
Drop Specification	Withstands multiple 8.0 ft./2.4 m drops to concrete		
Tumble Specification	5,000 tumbles @ 3.3 ft. (1 m)		
Sealing	Scanner: IP65 and IP67; FLB cradle: IP65		
ESD	Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge		

Utilities and Mai	intenance		
123Scan²	Programs scanner parameters, upgrades firmware, provides scanned barcode data and prints reports. For more information, visit www.zebra.com/123Scan		
Scanner SDK	Generates a fully-featured scanner application including documentation, drivers, test utilities and sample source code. For more information visit https://www.zebra.com/windowsSDK		
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and queries its asset information. For more information, visit www.zebra.com/sms		
Wireless Conne	ctivity		
Bluetooth Radio	Bluetooth Class 1, Version 4.0 (LE), serial port and HID profiles		
Data Rate	3 Mbit/s (2.1 Mbit/s) for Classic Bluetooth 1 Mbit/s (0.27 Mbit/s) for Low Energy		
Radio Range	Direct line of sight in open air : Class 1: Up to 300 ft. (100.0 m) Class 2: Up to 30 ft. (10.0 m)		
Recommended	Services		
Zebra <i>OneCare</i> Select; Zeb	ora <i>OneCare</i> Essential		
Decode Ranges			
Symbology/Resolution	Near/Far		
Code 128: 5 mil	1.3-6.7 in./3.3-17 cm		
Code 128: 20 mil	2.8-28.0 in./7.1-71.1 cm		
Code 128: 40 mil	1.7-60 in./4.4-152.4 cm		
Datamatrix: 7.5 mil	1.9-6.0 in./ 4.8-15.2 cm		
Datamatrix: 10.0 mil	1.4-8.6 in./3.5-21.8 cm		

- \* Dependent upon barcode size and symbology.

  \*\* Heated scanner holder accessory required for use in freezers.

  \*\*\* Refer to Product Reference Guide for complete list of symbologies.

## **DS36x8-SR Upgrade Opportunity**

## WHY SHOULD YOUR CUSTOMER UPGRADE FROM THE ZEBRA DS3508-SR OR DS3578-SR?

Zebra DS3608-SR/ DS3678-SR Zebra DS3508-SR/ DS3578-SR

Why it Matters





	1		
Rugged Design			
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	More rugged: The 3600 Series' 8 ft. drop spec sets a new industry standard; scan performance will not be compromised even after repeated 8 ft. drops to concrete.
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	Simulates the real-world tumbling that occurs with a drop. The ability to withstand 5,000 tumbles is a testament to the 3600 Series' ultra-rugged durability.
Sealing: Scanner	IP65 and IP67	IP65	Dusty and dirty conditions are ubiquitous in an industrial environment, and outdoor use in rainy or freezing conditions are common. The 3600 Series is the first line of scanners to offer both IP65 and IP67 sealing.
Sealing: Base	IP65	No	Cordless rugged scanners are only as good as the cradle they come with, and the 3600 Series features the industry's only "go anywhere" rugged cradle with an IP65 rating.
Operating Temperature	Corded: -22° to 122° F/-30° to 50° C Cordless: -4° F to 122° F/ -20° C to 50° C	Corded/Cordless: -4° F to 122° F/ -20° C to 50° C	Corded version offers more extreme temperature rating down to -30°C.
Freezer compliant cables	Yes	No	With the 3600 Series, the same scanner used in the warehouse can also be used in the freezer and other cold environments.
Data Capture Featu	res		
Scan engine	SE4710	SE4500	The SE4710 offers near contact performance like the DS35x8-SR,but also adds better far-field performance (for mid-range applications). Refer to the DS36x8-HP section for more details on read range differences between the DS3500, DS36x8-SR and DS36x8-HP.
Simultaneous multi-code capture	Yes	No	Multicode 2.0: Best support for labels with multiple barcodes.
Cordless Features			
Bluetooth	4.0	2.1	The DS3678-SR is the only device in its class to support Bluetooth 4.0 (Low Energy) for lightning fast communication and maximum energy efficiency.
Wi-Fi friendly	Yes	No	Eliminates the wireless interference that Bluetooth devices often create in a Wi-Fi environment.
Battery Charge Gauge	Yes	No	First-in-its-class battery 'charge gauge' makes it easy for users to monitor remaining power.
PowerPrecision+ Battery	Yes: 3100 mAh	No: 2200 mAh	New 3100 mAh battery offers more capacity to last a full shift and longer. PowerPrecision+ offers a wealth of battery health-related data, including charge cycles consumed, current battery status and a State of Health meter.

## **Competitive Comparison**

#### WHY IS THE DS36X8-SR SUPERIOR TO THE COMPETITION?

In the chart below, blue shading indicates the best specification available for a specific feature. The DS36X8-SR out performs every device in its class when it comes to rugged design, scanning performance, cordless technology and manageability features.

	Zebra DS3608-SR/ DS3678-SR	Datalogic PD9530	Datalogic PBT9530	Honeywell 1910i-ER	Honeywell 1911i-ER	Cognex DM8050
		9				
Rugged Design						
Single Board Construction	Yes	No	No	No	No	No
Drop Specification	8.0 ft./2.4 m to concrete	6.6 ft./2.0 m to concrete	6.6 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2 m
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	No	5,000 tumbles from 3.2 ft./1 m	5,000 tumbles from 3.2 ft./1 m	No
Sealing: Scanner	IP65 and IP67	IP65	IP65	IP65	IP65	Not specified
Sealing: Base	IP65	N/A	Not specified	N/A	IP51	Not specified
Operating Temperature	Corded: -22° to 122° F/-30° to 50° C*	-4 to 122 °F/ -20 to 50 °C	-4 to 122 °F/-20 to 50 °C	-22° to 122° F/ -30° to 50° C	-4° to 122°F/ -20° to 50°C	32° to 104° F/ 0° to 40° C
Freezer compliant cables	Yes	No	No	No	No	No
Data Capture Fea	tures					
Read Range	Near contact to nearly 5 ft./1.5 m	Contact to over 3.3 ft./1.0 m	Contact to over 3.3 ft./1.0 m	Out to 2.5 ft./0.75 m	Out to 2.5 ft./0.75 m	Not specified
Simultaneous multi-code capture	Yes	No	No	Yes	Yes	No
Pick-list selector	Yes	No	No	Yes	Yes	No
Cordless Features	5					
Bluetooth	4.0	N/A	3.0	N/A	2.1	Version not listed
Wi-Fi friendly	Yes	No	No	No	No	No
Battery Charge Gauge	Yes	No	No	No	No	No
Battery Metrics	Yes	No	No	No	No	No
Other						
Complimentary Tools	Scanner Management Service; 123Scan <sup>2</sup>	Configuration software	Configuration software	Configuration software	Configuration software	Configuration software

### DS3608-HP/DS3678-HP



WHEN YOUR CUSTOMERS **NEED UNSTOPPABLE PERFORMANCE FOR 1D/2D BARCODES, PLUS** PHOTOS, DOCUMENTS AND OCR,

## **ZEBRA'S 3600-HP SERIES DELIVERS.**

Applications for the DS3608-HP and DS3678-HP include:

Shipping and receiving at dock doors for larger items

**Proof of Delivery** 

**Proof of Condition** 

**Image capture** 

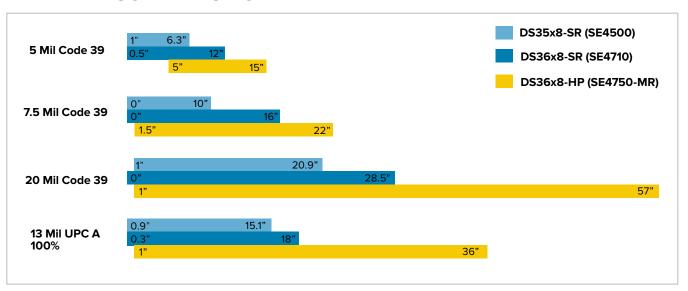


## Does Your Customer Need the DS36x8-SR or DS36x8-HP?

Whether your customer is upgrading from the DS35x8-SR or a competitive device like Datalogic PBT9530 or Honeywell 1900i-ER, they will benefit from either the DS36x8-SR Standard Range model or the DS36x8-HP High Performance model. Here are the key differences between the SR and HP models to help you position the right product for the sales opportunity.

	Zebra DS3608-SR/DS3678-SR	Zebra DS3608-HP/DS3678-HP
Overview	Standard Range Image: Offers basic imaging features, better near field performance and good mid-range performance	High Performance Imager: Offers value-add imaging features and a significantly improved far field scanning zone
Target for Customers Who	Have a primary need to read barcodes at an arm's length and do not need advanced imaging or far field scanning	Require far field scanning; do not need reading at contact; need image/document capture/OCR
Basic image capture	•	•
OCR		•
Document Imaging		•
Read Range	See Ch	art Below
	LED Aimer	Laser Aimer
Aimer		

## READ RANGE: DS36X8-HP OFFERS SIGNIFICANTLY IMPROVED FAR FIELD SCANNING ZONE



# **Top 16** Competitive Advantages for the DS3608-HP/DS3678-HP



#### **UNMATCHED DEVICE PERFORMANCE**

- Unparalleled scanning performance
- Double the working range of competitive devices
- · Capture photos, documents and OCR
- Only device to offer Bluetooth 4.0
- Only device to offer Wi-Fi Friendly Mode
- Double the battery power up to 70,000 scans per charge

#### **INDUSTRY-LEADING RUGGED DESIGN**

- Only device to offer an 8 ft. drop spec
- Only device to offer a double sealing rating: IP65 and IP67
- Only device with a rugged cradle
- Only device with freezer compliant cables
- Only device to offer single-board construction

#### **EASIER FOR WORKERS TO USE**

- Only device to offer a battery charge gauge
- Only device to offer a Bluetooth status LED
- Capture up to 20 barcodes simultaneously

#### **EASIER TO MANAGE**

- Detailed battery metrics for superior battery management
- Industry-best free management tools

## **DS36x8-HP Specifications**

Physical Charac	cteristics		
Dimensions	Corded: 7.3 in. H x 3.0 in. W x 5.2 in. D 18.5 cm H x 7.6 cm W x 13.2 cm D Cordless: 7.3 in. H x 3.0 in. W x 5.6 in. D 18.5 cm H x 7.6 cm W x 14.2 cm D		
Weight	Corded: 10.9 oz./309 g; Cordless: 14.5 oz./411 g		
Input Voltage Range	Host powered: 4.5 VDC min., 5.5 VDC max. External power supply: 11.4 VDC min., 12.6 VDC max.		
Operating Current	DS3608-HP (corded): 450 mA (typical)		
Standby Current	DS3608-HP (corded): 100 mA (typical)		
Color	Industrial Green		
Supported Host Interfaces	USB, RS232, Keyboard Wedge		
Battery	PowerPrecision+ 3100 mAh Li-lon rechargeable battery		
User Indicators	Direct decode indicator; LEDs; beeper; vibration		
Performance Cl	naracteristics		
Scans per Full Charge	70,000+		
Illumination	Two (2) warm white light LEDs		
Imager Field of View	Horizontal: 31°, Vertical: 23°		
Image Sensor	1,280 x 960 pixels		
Minimum Print Contrast	15% minimum reflective difference		
Skew/Pitch/Roll	Skew: ± 60°; Pitch: ± 60°; Roll: ± 360°		
Decode Capabi	lities**		
1D	Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma)		
2D	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Chinese Sensible (Han Xin), Postal Codes		
OCR	OCR-A/B, MICR-E13B, US Currency Serial Number		
User Environme	ent		
Operating Temp.	Corded: -22° F to 122° F/-30° C to 50° C Cordless: -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% condensing		
Drop Specification	Withstands multiple 8.0 ft./2.4 m drops to concrete		
Tumble Specification	5000 tumbles @ 3.3 ft. (1 m)		
Sealing	Scanner: IP65 and IP67; FLB cradle: IP65		
ESD	Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge		
A mala i mala la mala	0 to 10 027 Foot Condica/0 to 100 000 L		

Utilities and Ma	intenance		
123Scan²	Programs scanner parameters, upgrades firmware, provides scanned barcode data and prints reports. For more information, visit www.zebra.com/123Scan		
Scanner SDK	Generates a fully-featured scanner application, including documentation, drivers, test utilities and sample source code. For more information, visit https://www.zebra.com/windowsSDK		
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and queries its asset information. For more information, visit https://www.zebra.com/sms		
Wireless Conne	ctivity		
Bluetooth Radio	Bluetooth Class 1, Version 4.0 (LE), serial port (SPP)and HID profiles		
Data Rate	3 Mbit/s (2.1 Mbit/s) for Classic Bluetooth 1 Mbit/s (0.27 Mbit/s) for Low Energy		
Radio Range	Direct line of sight in open air: Class 1: Minimum 300 ft. (100.0 m); Class 2: Minimum 30 ft. (10.0 m)		
Warranty			
DS3608-HP/DS3678-HP i materials for a period of t	bra's hardware warranty statement, the s warranted against defects in workmanship and hree (3) years from the date of shipment. For nent, go to: http://www.zebra.com/warranty		
Recommended	Services		
Zebra <i>OneCare</i> Select; Zeb	ora <i>OneCare</i> Essential		
Decode Ranges			
Symbology/Resolution	Near/Far		
-,			

 $^{\ast}$   $\,$  Heated scanner holder accessory required for use in freezers.

Code 128: 20 mil

Code 128: 40 mil

Datamatrix: 7.5 mil

Datamatrix: 10.0 mil

 $^{\ast\ast}$  Refer to Product Reference Guide for complete list of symbologies.

5.0-45.0 in./12.7-114.3 cm

2.8-80 in./7.1-203.2 cm

7.0-11.0 in./ 17.8-27.9 cm

6.0-15.0 in./15.2-38.1 cm

**Ambient Light** Immunity

0 to 10,037 Foot Candles/0 to 108,000 Lux

(direct sunlight)

## **DS36x8-HP Upgrade Opportunity**

#### WHY SHOULD YOUR CUSTOMER UPGRADE FROM THE ZEBRA DS3508-SR OR DS3578-SR?

Zebra DS3608-HP/ DS3678-HP

Zebra DS3508-SR/ DS3578-SR

Why it Matters





Rugged Design			
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	More rugged: The 3600 Series' 8 ft./2.4 m drop spec sets a new industry standard; Scan Performance will not be compromised even after repeated 8 ft. drops to concrete.
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	Simulates the real-world tumbling that occurs with a drop. The ability to withstand 5,000 tumbles is a testament to the 3600 Series' ultra-rugged durability.
Sealing: Scanner	IP65 and IP67	IP65	Dusty and dirty conditions are ubiquitous in an industrial environment, and outdoor use in rainy or freezing conditions are common. The 3600 Series is the first line of scanners to offer both IP65 and IP67 sealing.
Sealing: Base	IP65	No	Cordless rugged scanners are only as good as the cradle they come with, and the 3600 Series features the industry's only "go anywhere" rugged cradle with an IP65 rating.
Operating Temperature	Corded: -22° to 122° F/-30° to 50° C Cordless: -4° F to 122° F/ -20° C to 50° C	Corded/Cordless: -4° F to 122° F/ -20° C to 50° C	Corded version offers more extreme temperature rating down to -30° C.
Freezer compliant cables	Yes	No	With the 3600 Series, the same scanner used in the warehouse can also be used in the freezer and other cold environments.
Data Capture Featu	ires		
Scan engine	SE4750-MR	SE4500	The DS36x8-HP offers a small near field dead zone, and a much improved far field scan zone. In fact, the DS36x8-HP is capable of scanning out to 7 ft./2.1 m away. And, the DS36x8-HP's bright and crisp aimer makes scanning from farther away clear and easy.
OCR	Yes	No	Makes capturing optical characters found on legal documents, work orders or invoices quick and easy.
Image and document capture	Yes	No	Easily capture and transfer images for enhanced versatility.
Simultaneous multi-code capture	Yes	No	Multicode 2.0: Best support for labels with multiple barcodes.
Cordless Features			
Bluetooth	4.0	2.1	The DS3678-HP is the only device in its class to support BT 4.0 (Low Energy) for lightning fast communication and maximum energy efficiency.
Wi-Fi friendly	Yes	No	Eliminates the wireless interference that Bluetooth devices often create in a Wi-Fi environment.
Battery Charge Gauge	Yes	No	First-in-its-class battery 'charge gauge' makes it easy for users to monitor remaining power.

## **Competitive Comparison**

#### WHY IS THE DS36X8-HP SUPERIOR TO THE COMPETITION?

Blue shading indicates the best specification available for a specific feature. The DS36X8-HP outperforms every device in its class when it comes to rugged design, scanning range, value add data capture features, cordless technology and manageability.

	Zebra DS3608-HP/ DS3678-HP	Datalogic PD9530-HP	Datalogic PBT9530-HP	Honeywell 1910i-ER	Honeywell 1911i-ER	Cognex DM8050
		9				
Rugged Design						
Single Board Construction	Yes	No	No	No	No	No
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2 m
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	No	5,000 tumbles from 3.2 ft./1 m	5,000 tumbles from 3.2 ft./1 m	No
Sealing: Scanner	IP65 and IP67	IP65	IP65	IP65	IP65	Not specified
Sealing: Base	IP65	N/A	Not specified	N/A	IP51	Not specified
Operating Temperature	Corded: -22° to 122° F/-30° to 50° C*	-4 to 122 °F/ -20 to 50 °C	-4 to 122 °F/ -20 to 50 °C	-22° to 122° F/ -30° to 50° C	-4° to 122°F/ -20° to 50°C	32° to 104° F/ 0° to 40° C
Freezer compliant cables	Yes	No	No	No	No	No
Data Capture Fea	tures					
Read Range	Near contact to nearly 7 ft./2.1 m	Contact to over 3.3 ft./1.0 m	Contact to over 3.3 ft./1.0 m	Out to 2.5 ft./0.75 m	Out to 2.5 ft./0.75 m	Not specified
OCR	Yes	No	No	Yes	Yes	No
Photos	Yes	Yes	Yes	Yes	Yes	Yes
Documents with auto correction	Yes	No	No	No	No	No
Simultaneous multi-code capture	Yes	No	No	Yes	Yes	No
Pick-list selector	Yes	No	No	No	No	No
Cordless Features	5					
Bluetooth	4.0	N/A	3.0	N/A	2.1	Version not listed
Wi-Fi friendly	Yes	No	No	No	No	No
Battery Charge Gauge	Yes	No	No	No	No	No
Battery Metrics	Yes	No	No	No	No	No
Other	Other					
Complimentary Tools	Scanner Management Service; 123Scan <sup>2</sup>	Configuration software	Configuration software	Configuration software	Configuration software	Configuration software

### DS3608-DP/DS3678-DP



WHEN YOUR CUSTOMERS **NEED UNSTOPPABLE PERFORMANCE FOR** 1D/2D DIRECT PART **MARKS AND STANDARD** PRINTED BARCODES,

## **ZEBRA'S 3600-DP SERIES DELIVERS.**

The specialized DS3608-DP and DS3678-DP are ideal for applications in automotive, aerospace and defense manufacturing, including:

**Track and trace** 

Lifetime identification (UID)

**Equipment maintenance** 

**Warranty service** 

Product authentication/ counterfeit prevention



# Top 16 Competitive Advantages for the DS3608-DP/DS3678-DP



#### **UNMATCHED DEVICE PERFORMANCE**

- Unparalleled scanning performance on 1D/2D barcodes
- Comprehensive patented features to capture every kind of mark
- Only device to offer an advanced illumination system for DPM
- Only device to offer Bluetooth 4.0
- Only device to offer Wi-Fi Friendly Mode

#### **INDUSTRY-LEADING RUGGED DESIGN**

- Only device to offer an 8 ft./2.4 m drop spec
- Only device to offer a double sealing rating: IP65 and IP67
- Only device with a rugged cradle
- Only device with freezer compliant cables
- Only device to offer single-board construction

#### **EASIER FOR WORKERS TO USE**

- Only device to offer a battery charge gauge
- Only device to offer a Bluetooth status LED
- Capture up to 20 barcodes simultaneously

#### **EASIER TO MANAGE**

- Detailed battery metrics for superior battery management
- Industry-best free management tools

## **DS36x8-DP Upgrade Opportunity**

#### WHY SHOULD YOUR CUSTOMER UPGRADE FROM THE ZEBRA DS3508-DP OR DS3578-DP?

Zebra DS3608-DP/ DS3678-DP

Zebra DS3508-DP/ DS3578-DP

Why it Matters





Rugged Design			
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	More rugged: The 3600 Series' 8 ft./2.4 m drop spec sets a new industry standard; scan performance will not be compromised even after repeated 8 ft. drops to concrete.
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	Simulates the real-world tumbling that occurs with a drop. The ability to withstand 5,000 tumbles is a testament to the 3600 Series' ultra-rugged durability.
Sealing: Scanner	IP65 and IP67	IP65	Dusty & dirty conditions are ubiquitous in an industrial environment, and outdoor use in rainy or freezing conditions are common. The 3600 Series is the first line of scanners to offer both IP65 and IP67 sealing.
Sealing: Base	IP65	No	Cordless rugged scanners are only as good as the cradle they come with, and the 3600 Series features the industry's only "go anywhere" rugged cradle with an IP65 rating.
Operating Temp	Corded: -22° to 122° F/-30° to 50° C Cordless: -4° F to 122° F/ -20° C to 50° C	Corded/Cordless: -4° F to 122° F/ -20° C to 50° C	Corded version offers more extreme temperature rating down to -30° C.
Freezer compliant cables	Yes	No	With the 3600 Series, the same scanner used in the warehouse can also be used in the freezer and other cold environments.
Data Capture Featu	res		
Scan engine	SE4750-DP	SE4500	Purpose built illumination and focus to read DP code that are often high density, low contrast, on materials with rough or noisy backgrounds and materials that may be highly reflective.
Cordless Features			
Bluetooth	4.0	2.1	The DS3678-DP is the only device in its class to support BT 4.0 (Low Energy) for lightning fast communication and maximum energy efficiency.
Wi-Fi friendly	Yes	No	Eliminates the wireless interference that Bluetooth devices often create in a Wi-Fi environment.
Battery Charge Gauge	Yes	No	First-in-its-class battery 'charge gauge' makes it easy for users to monitor remaining power.
PowerPrecision+ Battery	Yes: 3100 mAh	No: 2200 mAh	New 3100 mAh battery offers more capacity to last a full shift. PowerPrecision+ offers a wealth of battery health data, including charge cycles, current battery status and a State of Health.

## **Competitive Comparison**

#### WHY IS THE DS36X8-DP SUPERIOR TO THE COMPETITION?

Blue shading indicates the best specification available for a specific feature. The DS36X8-DP outperforms every device in its class when it comes to rugged design, scan performance, cordless technology and manageability.



Rugged Design						
Single Board Construction	Yes	No	No	No	No	No
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	Not specified	Not specified
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	No	No	No	No
Sealing: Scanner	IP65 and IP67	IP65	IP65	IP54	Not specified	Not specified
Sealing: Base	IP65	N/A	Not specified	No	Not specified	Not specified
Operating Temperature	Corded: -22° to 122° F/-30° to 50° C*	-4 to 122 °F/ -20 to 50 °C	-4 to 122 °F/ -20 to 50 °C	-4 to 122 °F/ -20 to 50 °C	32° to 104° F/ 0° to 40° C	32° to 104° F/ 0° to 40° C
Freezer compliant cables	Yes	No	No	No	No	No
Data Capture Fea	tures					
DPM	Yes	Yes	Yes	Yes	Yes	Yes
Advanced Illumination	Yes	No	No	No	No	No
Photos	Yes	Yes	Yes	Yes	No	No
Cordless Features	;					
Bluetooth	4.0	N/A	3.0	2.1	Version not listed	Version not listed
Wi-Fi friendly	Yes	No	No	No	No	No
Battery Charge Gauge	Yes	No	No	No	No	No
Battery Metrics	Yes	No	No	No	No	No
Other						
Complimentary Tools	Scanner Management Service; 123Scan <sup>2</sup>	Configuration software				

### DS3608-HD/DS3678-HD



WHEN YOUR CUSTOMERS **NEED UNSTOPPABLE PERFORMANCE FOR HIGH DENSITY 1D/2D BARCODES** PRINTED DIRECTLY ON PRODUCT COMPONENTS,

## **ZEBRA'S 3600-HD SERIES DELIVERS.**

The DS3608-HD and DS3678-HD are ideal for electronics, medical equipment and telecom infrastructure production lines for:

Track and trace

**Quality control** 

Work-in-process (WIP)



# Top 15 Competitive Advantages for the DS3608-HD/DS3678-HD



#### **UNMATCHED DEVICE PERFORMANCE**

- Superior scanning on any high density 1D/2D barcode, including tiny and dense 3 mil codes
- More than 40% greater range than other devices in its class
- Only device to offer Bluetooth 4.0
- Only device to offer Wi-Fi Friendly Mode
- Double the battery power up to 70,000 scans per charge

#### **INDUSTRY-LEADING RUGGED DESIGN**

- Only device to offer an 8 ft./2.4 m drop spec
- Only device to offer a double sealing rating: IP65 and IP67
- Only device with a rugged cradle
- Only device with freezer compliant cables
- Only device to offer single-board construction

#### **EASIER FOR WORKERS TO USE**

- Only device to offer a battery charge gauge
- Only device to offer a Bluetooth status LED
- Capture up to 20 barcodes simultaneously

#### **EASIER TO MANAGE**

- Detailed battery metrics for superior battery management
- Industry-best free management tools

## **DS36x8-HD Specifications**

Physical Charac			
Dimensions	Corded: 7.3 in. H x 3.0 in. W x 5.2 in. D 18.5 cm H x 7.6 cm W x 13.2 cm D		
	Cordless: 7.3 in. H x 3.0 in. W x 5.6 in. D		
	18.5 cm H x 7.6 cm W x 14.2 cm D		
Weight	Corded: 10.9 oz./309 g; Cordless: 14.5 oz./411 g		
Input Voltage Range	Host powered: 4.5 VDC min., 5.5 VDC max. External power supply: 11.4 VDC min., 12.6 VDC max.		
Operating Current	DS3608-HD (corded): 450 mA (typical)		
Standby Current	DS3608-HD (corded): 100 mA (typical)		
Color	Industrial Green		
Supported Host Interfaces	USB, RS232, Keyboard Wedge		
Battery	PowerPrecision+ 3100 mAh Li-lon rechargeable battery		
User Indicators	Direct decode indicator; LEDs; beeper; vibration		
Performance C	haracteristics		
Scans per Full Charge	70,000+		
Illumination	Two (2) warm white light LEDs		
Imager Field of View	Horizontal: 31°, Vertical: 23°		
Image Sensor	1,280 x 960 pixels		
Minimum Print Contrast	15% minimum reflective difference		
Skew/Pitch/Roll	Skew: ± 60°; Pitch: ± 60°; Roll: ± 360°		
Decode Capabi	lities*		
1D	Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma)		
2D	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Chinese Sensible (Han Xin), Postal Codes		
User Environme	ent		
Operating Temp.	Corded: -22° F to 122° F/-30° C to 50° C Cordless: -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% condensing		
Drop Specification	Withstands multiple 8.0 ft./2.4 m drops to concrete		
Tumble Specification	5000 tumbles @ 3.3 ft. (1 m)		
Sealing	Scanner: IP65 and IP67; FLB cradle: IP65		
ESD	Per EN61000-4-2, ±25 KV air discharge, ±10 K direct discharge, ±10 KV indirect discharge		
Ambient Light Immunity	0 to 10,037 Foot Candles/0 to 108,000 Lux (direct sunlight)		
	·		

123Scan <sup>2</sup>	Programs scanner parameters, upgrades firmware, provides scanned barcode data and prints reports. For more information, visit www.zebra.com/123Scan
Scanner SDK	Generates a fully-featured scanner application including documentation, drivers, test utilities and sample source code. For more information visit https://www.zebra.com/windowsSDK
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and queries its asset information. For more information, visit https://www.zebra.com/sms
Wireless Conne	ctivity
Bluetooth Radio	Bluetooth Class 1, Version 4.0 (LE), serial port (SPP)and HID profiles
Data Rate	3 Mbit/s (2.1 Mbit/s) for Classic Bluetooth 1 Mbit/s (0.27 Mbit/s) for Low Energy
Radio Range	Direct line of sight in open air: Class 1: Minimum 300 ft. (100.0 m); Class 2: Minimum 30 ft. (10.0 m
Warranty	
DS3608-HD/DS3678-HD and materials for a period	ebra's hardware warranty statement, the is warranted against defects in workmanship d of three (3) years from the date of shipment. Fo ment, go to: http://www.zebra.com/warranty
Recommended	Services
Zebra <i>OneCare</i> Select; Zel	ora <i>OneCare</i> Essential
Decode Ranges	-

Near/Far

2.0-3.0 in./5.1-7.6 cm

2.2-26.0 in./5.6-66.0 cm

1.0-9.0 in./ 2.5-22.9 cm

2.0-6.0 in./5.1-15.2 cm

Symbology/Resolution

Code 128: 3 mil

Code 128: 20 mil

Datamatrix: 10 mil

PDF417: 5 mil

<sup>\*</sup> Refer to Product Reference Guide for complete list of symbologies.

## **DS36x8-HD Upgrade Opportunity**

#### WHY SHOULD YOUR CUSTOMER UPGRADE FROM THE ZEBRA DS35X8-HD?

Zebra DS3608-HD/ DS3678-HD

Zebra DS3508-HD/ DS3578-HD

**Why it Matters** 





Rugged Design			
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	More rugged: The 3600 Series' 8 ft./2.4 m drop spec sets a new industry standard; scan performance will not be compromised even after repeated 8 ft. drops to concrete.
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	Simulates the real-world tumbling that occurs with a drop. The ability to withstand 5,000 tumbles is a testament to the 3600 Series' ultra-rugged durability.
Sealing: Scanner	IP65 and IP67	IP65	Dusty & dirty conditions are ubiquitous in an industrial environment, and outdoor use in rainy or freezing conditions are common. The 3600 Series is the first line of scanners to offer both IP65 and IP67 sealing.
Sealing: Base	IP65	No	Cordless rugged scanners are only as good as the cradle they come with, and the 3600 Series features the industry's only "go anywhere" rugged cradle with an IP65 rating.
Operating Temperature	Corded: -22° to 122° F/-30° to 50° C Cordless: -4° F to 122° F/ -20° C to 50° C	Corded/Cordless: -4° F to 122° F/ -20° C to 50° C	Corded version offers more extreme temperature rating down to -30° C.
Freezer compliant cables	Yes	No	With the 3600 Series, the same scanner used in the warehouse can also be used in the freezer and other cold environments.
Data Capture Featu	res		
Scan engine	SE4750	SE4500	Custom focus to achieve barcode reading down to 3 mil with little to no sacrifice on reading lower density codes.
Simultaneous multi-code capture	Yes	No	Multicode 2.0: Best support for labels with multiple barcodes.
Cordless Features			
Bluetooth	4.0	2.1	The DS3678-HD is the only device in its class to support BT 4.0 (Low Energy) for lightning fast communication and maximum energy efficiency.
Wi-Fi friendly	Yes	No	Eliminates the wireless interference that Bluetooth devices often create in a Wi-Fi environment.
Battery Charge Gauge	Yes	No	First-in-its-class battery 'charge gauge' makes it easy for users to monitor remaining power.
PowerPrecision+ Battery	Yes: 3100 mAh	No: 2200 mAh	New 3100 mAh battery offers more capacity to last a full shift. PowerPrecision+ offers a wealth of battery health data, including charge cycles, current battery status and a State of Health.

# **Competitive Comparison**

## WHY IS THE DS36X8-HD SUPERIOR TO THE COMPETITION?

Blue shading indicates the best specification available for a specific feature. The DS36X8-HD outperforms every device in its class when it comes to rugged design, scan performance, cordless technology and manageability.

	Zebra DS3608-HD/ DS3678-HD	Datalogic PD9530	Datalogic PBT9530	Honeywell 1910i-ER	Honeywell 1911i-ER	Cognex DM8050
		9				
Rugged Design						
Single Board Construction	Yes	No	No	No	No	No
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2 m
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	No	5,000 tumbles from 3.2 ft./1 m	5,000 tumbles from 3.2 ft./1 m	No
Sealing: Scanner	IP65 and IP67	IP65	IP65	IP65	IP65	Not specified
Sealing: Base	IP65	N/A	Not specified	N/A	IP51	Not specified
Operating Temperature	Corded: -22° to 122° F/-30° to 50° C*	-4 to 122 °F/ -20 to 50 °C	-4 to 122 °F/ -20 to 50 °C	-22° to 122° F/ -30° to 50° C	-4° to 122°F/ -20° to 50°C	32° to 104° F/ 0° to 40° C
Freezer compliant cables	Yes	No	No	No	No	No
Data Capture Fea	tures					
Read Range	Near contact to nearly 5 ft./1.5 m	Contact to over 3.3 ft./1.0 m	Contact to over 3.3 ft./1.0 m	Out to 2.5 ft./0.75 m	Out to 2.5 ft./0.75 m	Not specified
Simultaneous multi-code capture	Yes	No	No	Yes	Yes	No
Pick-list selector	Yes	No	No	Yes	Yes	No
Cordless Features	5					
Bluetooth	4.0	N/A	3.0	N/A	2.1	Version not listed
Wi-Fi friendly	Yes	No	No	No	No	No
Battery Charge Gauge	Yes	No	No	No	No	No
Battery Metrics	Yes	No	No	No	No	No
Other						
Complimentary Tools	Scanner Management Service; 123Scan <sup>2</sup>	Configuration software	Configuration software	Configuration software	Configuration software	Configuration software

## DS3608-ER/DS3678-ER



WHEN YOUR CUSTOMERS
NEED UNSTOPPABLE
PERFORMANCE FOR
1D/2D BARCODES IN
HAND TO AS FAR AS
70 FT./21.4 M AWAY,

# ZEBRA'S 3600-ER SERIES DELIVERS.

Applications for the DS3608-ER and DS3678-ER include:

Picking/putaway/replenishment

All forklift applications

**Cross docking** 



# Top 15 Competitive Advantages for the DS3608-ER/DS3678-ER



## **UNMATCHED DEVICE PERFORMANCE**

- Reads 1D and 2D barcodes up to 60 percent closer and 35 percent farther than similar models in its class
- Only near /far scanner in the market to read wide picklist codes up close
- Only device to offer Bluetooth 4.0
- Only device to offer Wi-Fi Friendly Mode
- Double the battery power up to 70,000 scans per charge

## **INDUSTRY-LEADING RUGGED DESIGN**

- Only device to offer an 8 ft./2.4 m drop spec
- Only device to offer a double sealing rating: IP65 and IP67
- Only device with a rugged cradle
- Only device with freezer compliant cables
- Only device to offer single-board construction

## **EASIER FOR WORKERS TO USE**

- Only device to offer a battery charge gauge
- Only device to offer a Bluetooth status LED
- Capture up to 20 barcodes simultaneously

## **EASIER TO MANAGE**

- Detailed battery metrics for superior battery management
- Industry-best free management tools

# **DS36x8-ER Upgrade Opportunity**

WHY SHOULD YOUR CUSTOMER UPGRADE FROM THE ZEBRA DS35X8-ER (1D/2D), LS3408-ER (1D) OR LS3578-ER (1D)?

Zebra DS3608-ER/ DS3678-ER Zebra DS3508-ER/ DS3578-ER Zebra LS3408-ER Zebra LS3578-ER

**Why it Matters** 









Rugged Design					
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	More rugged: The 3600 Series' 8 ft. drop spec sets a new industry standard; Scan Performance will not be compromised even after repeated 8 ft. drops to concrete.
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	No	2,500 tumbles from 3.2 ft./1 m	Simulates the real-world tumbling that occurs with a drop. The ability to withstand 5,000 tumbles is a testament to the 3600 Series' ultra-rugged durability.
Sealing: Scanner	IP65 and IP67	IP65	IP65	IP65	Dusty and dirty conditions are ubiquitous in an industrial environment, and outdoor use in rainy or freezing condition are common. The 3600 Series is the first line of scanners to offer both IP65 and IP67 sealing.
Sealing: Base	IP65	No	N/A	No	Cordless rugged scanners are only as good as the cradle they come with, and the 3600 Series features the industry's only "go anywhere" rugged cradle with an IP65 rating.
Freezer compliant cables	Yes	No	No	No	With the 3600 Series, the same scanner used in the warehous can also be used in the freezer and other cold environments.
Data Capture Fe	eatures				
Read Range	From 3 in./7.6 cm to 70 ft./21.4 m	From near contact to 30 ft./9.14 m away	From .25"/.64 cm to 45 ft./13.7 m	.25 in./.64 cm to as far away as 45 ft./13.7 m	The range of the DS36x8-ER is 57% greater than the DS35x8-E imager and 35% greater than the 1D laser models, enabling workers to reach more pallets and warehouse shelves faster, without having to move closer.
Supports 2D barcodes	Yes	Yes	No	No	When your customers move to 2D barcodes, the DS36x8-El will support them, while still delivering the same powerful performance and read range that customers have come to expect from our extended range laser scanners.
Near Read Range for Wide Barcodes (4.0 in./10.2 cm)	7 in./17.8 cm				The DS36x8-ER is the only near /far scanner on the market to read wide picklist codes up close. You can offer your customers one scanner that can easily read barcodes on th uppermost shelves of warehouse racks, as well as extrawide codes just a hands-length away.
Multi-code capture	Yes	No	No	No	Enhances productivity when dealing with labels that have multiple barcodes.
Cordless Featur	es				
Bluetooth	4.0	2.1	N/A	1.2	The DS3678-ER is the only device in its class to support BT 4.0 (Low Energy) for lightning fast communication and maximum energy efficiency.
Wi-Fi friendly	Yes	No	N/A	No	Eliminates the wireless interference that Bluetooth devices often create in a Wi-Fi environment.
Battery Charge Gauge	Yes	No	N/A	No	First-in-its-class battery 'charge gauge' makes it easy for users to monitor remaining power.
PowerPrecision+ Battery	Yes (3100 mAh)	No (2200 mAh)	N/A	No (2200 mAh	New 3100 mAh battery offers more capacity to last a full shift. PowerPrecision+ offers a wealth of battery health data, including charge cycles, current battery status and a State of Health.

# **Competitive Comparison**

## WHY IS THE DS36X8-ER SUPERIOR TO THE COMPETITION?

Blue shading indicates the best specification available for a specific feature. The DS36X8-ER outperforms every device in its class when it comes to rugged design, read range, performance on wide barcodes, cordless technology and manageability.

	Zebra DS3608-ER DS3678-ER	Honeywell 1980i-FR	Honeywell 1981i-FR	
Rugged Design				
Single Board Construction	Yes	No	No	
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	6.5 ft./2.0 m to concrete	
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	No	No	
Sealing: Scanner	IP65 and IP67	IP65	IP65	
Sealing: Base	IP65	N/A	IP51	
Operating Temperature	Corded: -22° to 122° F/-30° to 50° C Cordless: -4° to 122° F/ -20° to 50° C	-22° to 122° F/-30° to 50° C	-4 to 122 °F/-20 to 50 °C	
Freezer compliant cables Yes		No	No	
Data Capture Features				
Read Range	From 3 in./7.6 cm to 70 ft./21.4 m	From 6 in./15 cm to 52 ft./16 m	From 6 in./15 cm to 52 ft./16 m	
Near Read Range for Wide Barcodes (4.0 in./10.2 cm)	7 in./17.8 cm	18 in./45.7 cm	18 in./45.7 cm	
Simultaneous multi-code capture	Yes	Yes	Yes	
Pick-list selector	Yes	Yes	Yes	
Cordless Features				
Bluetooth	4.0	N/A	2.1	
Wi-Fi friendly	Yes	N/A	No	
Battery Charge Gauge	Yes	N/A	No	
Battery Metrics	Yes	N/A	No	
Other				
Complimentary Tools	Scanner Management Service; 123Scan <sup>2</sup>	Configuration software	Configuration software	

## LI3608/LI3678



WHEN YOUR CUSTOMERS **NEED UNSTOPPABLE PERFORMANCE FOR STANDARD RANGE SCANNING OF** 1D BARCODES,

# **ZEBRA'S 3600 LINEAR IMAGER (LI) SERIES DELIVERS.**

Applications for the LI3608 and LI3678 include:

Shipping and receiving at dock doors

Small item pick and pack

Manufacturing work-in-process (WIP)



# **Top 15** Competitive Advantages for the LI3608/LI3678



## **UNMATCHED DEVICE PERFORMANCE**

- Unparalleled scanning performance on 1D barcodes
- 30% greater working range than other devices in its class
- Only device to offer Bluetooth 4.0
- Only device to offer Wi-Fi Friendly Mode
- Double the battery power up to 70,000 scans per charge

## **INDUSTRY-LEADING RUGGED DESIGN**

- Only device to offer an 8 ft./2.4 m drop spec
- Only device to offer a double sealing rating: IP65 and IP67
- Only device with a rugged cradle
- Only device with freezer compliant cables
- Only device to offer single-board construction

## **EASIER FOR WORKERS TO USE**

- Only device to offer a battery charge gauge
- Only device to offer a Bluetooth status LED
- Crispest aiming pattern in its class

## EASIER TO MANAGE

- Detailed battery metrics for superior battery management
- Industry-best free management tools

# LI36x8 Specifications

Physical Characteristics				
Dimensions	Corded: 7.3 in. H x 3.0 in. W x 5.2 in. D 18.5 cm H x 7.6 cm W x 13.2 cm D Cordless: 7.3 in. H x 3.0 in. W x 5.6 in. D 18.5 cm H x 7.6 cm W x 14.2 cm D			
Weight	Corded: 10.1 oz./287 g; Cordless: 13.6 oz./385 g			
Input Voltage Range	Host powered: 4.5 VDC min., 5.5 VDC max. External power supply: 11.4 VDC min., 12.6 VDC max.			
Operating Current	LI3608 (corded): 170 mA (typical)			
Standby Current	LI3608 (corded): 40 mA (typical)			
Color	Industrial Green			
Supported Host Interfaces	USB, RS232, Keyboard Wedge			
Battery	PowerPrecision+ 3100 mAh Li-lon rechargeable battery			
User Indicators	Direct decode indicator; LEDs; beeper; vibration			
Performance Cl	haracteristics			
Scans per Full Charge	70,000+			
Illumination	Two (2) 617nm Amber LEDs			
Imager Field of View	35°			
Image Sensor	1,500 pixels			
Minimum Print Contrast	15% minimum reflective difference			
Skew/Pitch/Roll	Skew: ± 65°; Pitch: ± 65°; Roll: ± 45°			
Decode Capabi	lities**			
1D	Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma)			
User Environme	ent			
Operating Temp.	Corded: -22° F to 122° F/-30° C to 50° C Cordless: -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% condensing			
Drop Specification	Withstands multiple 8.0 ft./2.4 m drops to concrete			
Tumble Specification	5,000 tumbles @ 3.3 ft. (1 m)			
Sealing	Scanner: IP65 and IP67; FLB cradle: IP65			
ESD	Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge			
Ambient Light Immunity	0 to 10,037 Foot Candles/0 to 108,000 Lux (direct sunlight)			

Utilities and Maintenance				
Programs scanner parameters, upgrades firmware, provides scanned barcode data and prints reports. For more information, visit www.zebra.com/123Scan				
Generates a fully-featured scanner application, including documentation, drivers, test utilities and sample source code. For more information, visit https://www.zebra.com/windowsSDK				
Remotely manages your Zebra scanner and queries its asset information. For more information, visit https://www.zebra.com/sms				
ctivity				
Bluetooth Class 1, Version 4.0 (LE), serial port and HID profiles				
3 Mbit/s (2.1 Mbit/s) for Classic Bluetooth 1 Mbit/s (0.27 Mbit/s) for Low Energy				
Direct line of sight in open air : Class 1: Up to 300 ft. (100.0 m) Class 2: Up to 30 ft. (10.0 m)				

## Warranty

Subject to the terms of Zebra's hardware warranty statement, the LI3608  $\,$ is warranted against defects in workmanship and materials for a period of  $% \left\{ 1\right\} =\left\{ 1\right\} =$ three (3) years from the date of shipment. For complete warranty statement, go to: http://www.zebra.com/warranty

#### **Recommended Services**

Zebra OneCare Select; Zebra OneCare Essential

## **Decode Ranges**

Symbology/Resolution	<b>N</b> ear/Far
Code 39: 4 mil	4.0-10.0 in./10.2-25.4 cm
Code 39: 7.5 mil	1.5-19.0 in./3.8-48.3 cm
UPC: 13 mil (100%)	1.0-31.0 in./2.5-78.7 cm
Code 39: 20 mil	0-42.0 in./0-106.7 cm

<sup>\*</sup> Heated scanner holder accessory required for use in freezers.

 $<sup>^{\</sup>ast\ast}$  Refer to Product Reference Guide for complete list of symbologies.

# **LI36x8 Upgrade Opportunity**

## WHY SHOULD YOUR CUSTOMER UPGRADE FROM THE ZEBRA LS3408-FZ OR LS3578-FZ?

Zebra LI3608/LI3678

Zebra LS3408-FZ/ LS3578-FZ

**Why it Matters** 





Rugged Design			
Drop Specification	8.0 ft./2.4 m to concrete	6.5 ft./2.0 m to concrete	More rugged: The 3600 Series' 8 ft./2.4 m. drop spec sets a new industry standard; Scan Performance will not be compromised even after repeated 8 ft. drops to concrete.
Tumble Specification	5,000 tumbles from 3.2 ft./1 m	2,500 tumbles from 3.2 ft./1 m	Simulates the real-world tumbling that occurs with a drop. The ability to withstand 5,000 tumbles is a testament to the 3600 Series' ultra-rugged durability.
Sealing: Scanner	IP65 and IP67	IP65	Dusty & dirty conditions are ubiquitous in an industrial environment, and outdoor use in rainy or freezing conditions are common. The 3600 Series is the first line of scanners to offer both IP65 and IP67 sealing.
Sealing: Base	IP65	No	Cordless rugged scanners are only as good as the cradle they come with, and the 3600 Series features the industry's only "go anywhere" rugged cradle with an IP65 rating.
Data Capture Featu	res		
Scan performance	Time to Decode - best Reads bad codes - best Read Range - best	Time to Decode - good Reads bad codes - good Read Range - good	The LI36x8 offers superior scan performance, with lightning fast capture of 1D barcodes in virtually any condition at longer ranges. In addition, the LI36x8 offers better scan performance when reading through plastic wrap that is common in warehouse applications.
Capable of reading barcodes off LCD screens	Yes	No	Increases application versatility: workers can scan 1D barcodes off computer screens and mobile devices.
Read range: 5 mil Code 39	3.3 in. to 14.5 in.	2.5 in. to 7.25 in.	
Read range at 7.5 mil Code 39	0 to 21.5 in.	2 to 15.75 in.	With the exception of near-field scanning of 5 mil barcodes, the LI36x8 offers better scanning range on both near-field and far-field data capture
Read range at 20 mil Code 39	0 to 41.5 in.	0 to 39.5 in.	on a wide range of barcode sizes.
Read range at 13 mil UPC-A	0 to 26.5 in.	1 to 24 in.	
Cordless Features			
Bluetooth	4.0	2.1	The LI3678 is the only device in its class to support Bluetooth 4.0 (Low Energy) for lightning fast communication and maximum energy efficiency.
Wi-Fi friendly	Yes	No	Eliminates the wireless interference that Bluetooth devices often create in a Wi-Fi environment.
Battery Charge Gauge	Yes	No	First-in-its-class battery 'charge gauge' makes it easy to monitor remaining power.
PowerPrecision+ Battery	Yes: 3100 mAh	No: 2200 mAh	New 3100 mAh battery offers more capacity to last a full shift and longer. PowerPrecision+ offers a wealth of battery health-related data, including charge cycles consumed, current battery status and a State of Health meter.

## **ZEBRA ULTRA-RUGGED FAMILY**

## WHAT ARE THE KEY DIFFERENCES BETWEEN EACH MODEL?

	LI3608/LI3678	DS3608-SR/ DS3678-SR	DS3608-HP/ DS3678-DP	DS3608-ER/ DS3678-ER	DS3608-HD/ DS3678-HD	DS3608-DP/ DS3678-DP	
Overview and	Overview and Target Applications						
Overview	1D Linear	1D/2D Standard Range	1D/2D High Performance; Mid-Range	1D/2D Long Range	1D/2D High Density	1D/2D Direct Part Marking	
Target Applications	Near field 1D reading, shipping and receiving on loading docks and receiving dock doors. Small item pick and pack, Manufacturing WIP	Near field 1D/2D reading, shipping and receiving on loading docks and receiving dock doors. Small Item pick and pack, Manufacturing WIP	Mid-Range reading for large items on loading docks for shipping and receiving. Package/ Courier services proof of delivery/image capture	Picking, forklift applications, warehouse/distribution, transportation cross dock	Manufacturing: electronics, medical equipment, telecom	Lifetime Identification (UID), Track & Trace, maintenance management, warranty service, product authentication, Automotive/Aerospace/ Defense	
Data Capture F	eatures						
Read Range		Near contact to nearly 5 ft./1.5 m	Near contact to nearly 7 ft./2.1 m	From 3 in./7.6 cm to 70 ft./21.4 m	Near contact to nearly 5 ft./1.5 m		
1D	•	•	•	•	•	•	
2D		•	•	•	•	•	
Basic Image Capture		•	•	•	•	•	
Advanced Image Capture			•				
DPM						•	
High Density Marks					•	•	
OCR			•	•	•		
Signature Capture			•				
Multi-code Capture		•	•	•	•	•	
Pick-list selector		•	•	•	•	•	

All models share the same industry-leading rugged specifications, cordless technology and manageability features

## **Features and Benefits**

Feature	Benefit			
Rugged Design: The following features are common to all models in the 3600 Series				
8 ft./2.4 m drop specification: 23 percent more durable than any device in its class	Today's warehouses often utilize all the vertical space they have. This means that the potential for longer drops is very real. Drops to concrete from a forklift or lift operator occur on a regular basis, often times while reaching high overhead to scan a stacked pallet. With an 8 foot drop spec, Zebra protects your customer's scanner investment and the data that drives their business.			
IP65 and IP67 sealing	Dusty and dirty conditions are common in industrial environments, as is outdoor use in the rain. The 3600 Series is completely sealed and impervious to dust and water. You use the scanners outdoors in the snow and rain, spray them with jetting water or submerse them in water for up to 30 minutes. Through all of these challenging environmental conditions, the 3600 Series continues to perform at peak levels to keep your customer's business moving. Zebra is the only manufacturer that can boast both an IP65 and IP67 sealing.			
IP65 cradle	Cordless rugged scanners are only as good as the cradle they come with. Cordless 3600 models feature a rugged 'go anywhere' cradle with IP65 sealing, the same extreme temperature rating as the scanner, plus industrial charging contacts that can last 250,000 insertions. These cradles are suitable for outdoor environments and can be washed down at the end of each shift.			
Tested to withstand 5,000 3.2 ft./1 m tumbles	Zebra's punishing tumble testing simulates the real-world tumbling that occurs with a drop.			
Operating temperature down to -22° F/ -30° C	The 3600 Series will work even in cold outdoor environments, protecting productivity levels. And, with the heated scanner holder (optional accessory), the 3600 Series can even be used in the freezer — allowing your customer to purchase the same device for multiple environments and applications.			
Single board construction	Eliminates one of the most common points of failure — the cables that connect multiple boards.			
Heated scanner holder to avoid condensation	If workers frequently travel in and out of the freezer, a heated scanner holder keeps the scanner head warm to prevent the buildup of condensation on the scanner head. Productivity is protected and performance is still unstoppable — in spite of constant temperature shocks.			
Cordless and Battery Desigr	n: The following features apply to cordless 3600 models			
Bluetooth 4.0	Bluetooth 4.0 (Low Energy) provides lightning fast wireless communication and maximum energy efficiency.			
Zebra Wi-Fi Friendly mode	Eliminates the wireless interference that Bluetooth devices can often create in Wi-Fi environments. Refer to Appendix H for more details on this feature.			
On-board charge gauge	A first-in-its-class battery 'charge gauge' shows the user how much charge is left on the battery so they are never surprised by a dead battery. Think about how much time is wasted by having to swap out an uncharged scanner mid-shift for a charged scanner — or worse: swapping out an uncharged scanner for another that may only be half-charged. The charge gauge alone on our models can virtually eliminate this type of work stoppage.			

# Features and Benefits (continued)

Feature	Benefit			
Cordless and Battery Design (continued): The following features apply to cordless 3600 models				
	3600 Series PowerPrecision+ batteries have 50% more capacity than other models on the market, ensuring your customers' cordless devices will be powered up to last a full shift and more.			
PowerPrecision+ battery	What makes our batteries better? We start with premium high-grade cells that have a higher capacity, providing longer life cycles than the typical competitive battery. The strong robust housing increases durability, while a design that helps prevent overcharging and electrical shock improves safety.			
A battery with a sub-zero temperature rating	While battery performance often erodes as the temperature drops, our unique PowerPrecision+ battery is rated for the freezer, with zero performance degradation at -4° F/-20° C. Your customers can give their workers the freedom of wireless in the freezer and other cold environments, without worrying about battery and reliability issues.			
	Smart battery technology enables IT and operations managers to make intelligent decisions about their cordless scanner pool to prevent unplanned downtime due to a dead or unhealthy battery. PowerPrecision+ batteries provide the ultimate in battery management data, including:			
PowerPrecision+ battery metrics	<ul> <li>Advanced state of health: predicts a highly accurate end-of-life estimate for each battery</li> <li>Battery capacity</li> <li>Total time battery has been in service</li> <li>Total times a battery has been charged</li> <li>And much more</li> </ul>			
Manageability: The following	ng features are common to all models in the 3600 Series			
123Scan²	<ul> <li>Loaded with time-saving features and functionality, 123Scan² reduces the headaches associated with scanner configuration:</li> <li>A wizard simplifies the scanner setup process. It can configure settings and update firmware on a single device or stage a large numbers of devices. It can display and save both barcode data and images.</li> <li>Configuration settings can be downloaded directly to the scanner or condensed to a single barcode that can be emailed to a smartphone or embedded in a Word document, enabling 1-scan, easy onsite configuration.</li> <li>Scanner asset tracking information, performance statistics and battery diagnostics can be saved to a spreadsheet.</li> </ul>			
Scanner Management Service (SMS)	Enables the remote management of Zebra scanners. With no operator intervention required, SMS lets your customer remotely access scanner asset information and statistics, set parameters and update firmware. The result? SMS dramatically reduces the costs of owning a fleet of scanners.			
The 3600 Series integrates seamlessly with Zebra's rugged industrial mobile computers and printers	Your customers get the benefit of one vendor who can provide the hardware devices, software solutions and service contracts they need. No other vendor can offer the end-to-end industrial solution that Zebra can.			

# Features and Benefits (continued)

Feature	Benefit			
Scanning Performance: LI3608/LI3678 Linear Imager				
First-time scanning of virtually any 1D barcode	The LI3608/LI3678 offers the simplicity of a traditional laser scanner with a faster time to decode. These scanners can read 1D barcodes faster than any other 1D scanner on the market — even if they are displayed on a screen, poorly printed or under heavy shrinkwrap. The LI36x8 offers an ideal experience for those customers who only need to read 1D barcodes and prefer a similar experience to laser scanners.			
30 percent more working range than competitive devices	This advanced linear imager offers 30 percent more working range than competitive devices, and captures barcodes as fast as your customer's workers can pull the trigger for extraordinary productivity — no need to pause between scans.			
Crispest aiming pattern in its class	Fast barcode capture requires accurate aiming. That's why the LI36X8 offers the industry's sharpest and brightest aiming pattern — ideal for first-time accurate capture of barcodes in pick lists.			
Capture printed and electronic barcodes	The LI3608/LI3678 can capture barcodes that are printed or displayed on any computer screen. Even if your customers don't use electronic barcodes today, they're ready for the future.			
Scanning Performance: The following scanning features are common to all DS3600 imager models				
PRZM Intelligent Imaging Technology	Unique to Zebra, PRZM resets the bar for 2D imaging by improving time decode and time to recover performance, dramatically improving the user experience, throughput and wait times. The result? Workers can capture barcodes as fast as they can pull the trigger for first-time every time scanning — and extraordinary productivity.			
Superior performance on damaged, dirty and other challenging barcodes	In industrial environments, numerous things can interfere with data capture. Barcodes get damaged, torn and smudged. They may be covered by shrink wrap or condensation. If a scanner cannot read barcodes in less than perfect condition, time is wasted and data is more subject to user error as the need for manual entry increases. The DS3600 Series protects productivity with its ability to read virtually any barcode, even if it is under shrinkwrap, covered in frost, damaged, dirty or poorly printed.			
Processes up to 20 barcodes simultaneously	Our powerful time-saving Multi-code feature is perfect for those labels that contain many barcodes. Your customers just specify which codes are to be captured, the order in which codes will be captured and how to format each code for their back-end application. One press of the scan trigger captures and transmits the data instantly to the right fields in the right applications — and the opportunity to scan the wrong codes on their labels is eliminated.			
Superior pick-list functionality	Pick lists are often a part of the workday in the warehouse and manufacturing plant. The DS3600 Series includes aiming technology that makes it easy for your customer's workers to select and scan even small barcodes.			
Capture printed and electronic barcodes	The DS3600 Series can capture barcodes that are printed or displayed on any computer screen. Even if your customers don't use electronic barcodes today, they're ready for the future.			

# **Features and Benefits (continued)**

Feature	Benefit				
Scanning Performance: D	Scanning Performance: DS3608-SR/DS3678-SR Standard Range Imager				
Offers the widest working range in its class	The DS36x8-SR can capture barcodes from near contact to nearly 5 ft./1.5 m away — a working range that's more than 50 percent greater than other devices in its class. With a single device, workers can capture a picklist in hand or a barcode on a pallet that's up to 5 ft. away. And if your customers need to capture barcodes at greater distances, present either the DS36x8-HP for up to 7 ft. or the DS36x8-ER for up to 70 ft.				
Scanning Performance: D	S3608-HP/DS3678-HP High Performance Imager				
Double the working range of competitive devices	The DS3608-HP/DS3678-HP captures barcodes, photos, documents and more from near contact to nearly 7 ft./2.1 m — more than twice the working range of competitive models in its class. This provides superior application versatility and value for your customers: with the same device, workers can capture a picklist in hand or a barcode on a pallet that's up to 7 ft. away.				
Captures photos, documents and OCR	With Zebra's intelligent document capture, the DS36x8-HP takes photos and sharpen and correct the images so they are easier to read. And support for multiple OCR fonts enables fast and easy transfer of data.				
Scanning Performance: D	S3608-ER/DS3678-ER Extended Range Imager				
Superior scanning range	The DS36x8-ER reads 1D and 2D barcodes printed on a label up to 60 percent closer and 35 percent farther than similar models in this class, with an extraordinary scanning range from 3 in. to 70 ft. (7.6 cm to 21.4 m). You can offer your customers one scanner that can easily read barcodes on a picklist in hand and on the uppermost shelves of your warehouse racks, as well as extra-wide codes just a hands-length away — even if they are under shrinkwrap, damaged, dirty or poorly printed.				
Scanning Performance: D	S3608-HD/DS3678-HD High Density Imager				
Superior scanning performance on any high density 1D/2D barcode	The DS36x8-HD delivers first time capture of high-density 1D and 2D barcodes printed on labels or directly on product components — including tiny and dense 3 mil codes that are barely visible to the naked eye.				
Added versatility and value with 1D/2D barcode capture	The DS36x8-HD can also capture barcodes printed on labels in virtually any condition — including damaged, dirty, poorly printed or under shrinkwrap. This dual functionality provides excellent value: your customers get one scanner they can use on the production line for tiny and dense barcodes — as well as in the warehouse for a wide range of applications from receiving to shipping.				
Scanning Performance: DS3608-DP/DS3678-DP DPM Imager					
Unmatched scanning performance on DPM	Comprehensive patented features enable the capture of literally every type of direct part mark (DPM) and printed 1D/2D barcode. DPM codes can be captured, regardless of size, surface, contrast or density — including the most challenging mark, dot peen, as well as laser etch, ink mark, chemical etch, inkjet mold, cast and thermal spray.				
Advanced illumination system (DPM)	Our advanced illumination technology provides the multiple lighting effects required to capture marks on any type of surface including very shiny, reflective, irregular and curves as well as low and high contrast marks on any type of surface.				



# **Revenue Opportunities**

**EVERY SALE PROVIDES THE OPPORTUNITY FOR REVENUE FROM MULTIPLE AREAS:** HARDWARE, APPLICATION DEVELOPMENT, INTEGRATION AND SUPPORT SERVICES

## Hardware Revenue: Devices



The first line of opportunity is the sale of the 3600 Series scanner and its accessories. Pricing details and your discount for hardware and accessories are located on the following pages.

## Software Revenue: Custom Application Development and Integration



Application development and integration provides an additional revenue opportunity, and there are multiple opportunities for application development with each 3600 Series sale:

· Develop and integrate a range of applications in warehousing and manufacturing, such as work in process, asset management, inventory management and warehouse management

## Services Revenue: Complete End-to-End Support



Selling services as part of the complete solution provides a significant opportunity to deliver more value to the enterprise customer as well as increase revenue. Zebra Technologies flexible services are designed to provide customers with assistance at every stage of the 3600 Series mobility solution, from planning to deployment and post-deployment support. Service contracts can play a significant role in helping ensure complete customer satisfaction with reduced risks, faster deployment time and a substantial reduction in overall service delivery costs, reducing downtime, IT time and cost and the total cost of ownership. Your own experience plus industry research shows that customers are more likely to select service plans when they're bundled up front with a hardware quote as part of a complete solution. When your customer purchases Zebra Technologies exceptional services, everyone benefits. The size of the sale is increased. And there's no better way to give your customers total service peace of mind, with protection for their investment from day one.

# **Configurations**

The following 3600 Series configurations are available. Please note the initial booking date for each model. Refer to Solution Builder for the latest configuration, availability and pricing information.

3600 Series Ultra Rugged Configurations: Scanners and Cradles				
Part Number	Description	Discount Category	List Price	Initial Booking Date
LI3608-SR00003VZWW	LI3608. Rugged Linear Imager, Standard range, Corded, Industrial green, Vibration motor	1A	\$540	3/1/2016
DS3608-SR00003VZWW	DS3608-SR. Rugged Area Imager, Standard range, Corded, Industrial green, Vibration motor	1A	\$685	3/1/2016
DS3608-HP20003VZWW	DS3608-HP. Rugged Area Imager, High Performance, Corded, Industrial green, Vibration motor	1A	\$730	3/1/2016
DS3608-HD20003VZWW	DS3608-HD. Rugged Area Imager, High Density, Corded, Industrial green, Vibration motor	1A	\$700	3/1/2016
LI3678-SR0F003VZWW	LI3678. Rugged Linear Imager, Standard range, Cordless, FIPS, Industrial green, Vibration motor	1A	\$690	4/1/2016
DS3678-SR0F003VZWW	DS3678-SR. Rugged Area Imager, Standard range, Cordless, FIPS, Industrial green, Vibration motor	1A	\$835	6/1/2016
DS3678-HP2F003VZWW	DS3678-HP. Rugged Area Imager, High Performance, Cordless, FIPS, Industrial green, Vibration motor	1A	\$880	6/1/2016
DS3678-HD2F003VZWW	DS3678-HD. Rugged Area Imager, High Density, Cordless, FIPS, Industrial green, Vibration motor	1A	\$850	6/1/2016
DS3608-ER20003VZWW	DS3608-ER. Rugged Area Imager, Extended Range, Corded, Industrial green, Vibration motor	1A	\$900	8/15/2016
DS3678-ER2F003VZWW	DS3678-ER. Rugged Area Imager, Extended Range, Cordless, FIPS, Industrial green, Vibration motor	1A	\$1,050	8/15/2016
DS3608-DP20003VZWW	DS3608-DP. Rugged Area Imager, Direct Part Marking, Corded, Industrial green, Vibration motor	1A	\$1,445	12/15/2016
DS3678-DP2F003VZWW	DS3678-DP. Rugged Area Imager, Direct Part Marking, Cordless, FIPS, Industrial green, Vibration motor	1A	\$1,595	12/15/2016
STB3678-C100F3WW	Standard Cradle for 3678 Series. Charger, Bluetooth and Multi Interface	1A	\$325	4/1/2016
FLB3678-C100F3WW	Sealed Fork Lift Cradle for 3678 Series. Charger, Bluetooth and Multi Interface. IP65 Sealed	1A	\$400	4/1/2016

## **Accessories**

The following charts list the available accessories for the 3600 Series. Please refer to Solution Builder for the latest information and pricing.

3600 Series Accessories			
Part Number	Description		List Price
Cables			
CBA-U47-S15ZAR	Cable - Shielded USB: Series A Connector, 15 ft. (4.6m), Straight, BC 1.2		\$65.00
CBA-U46-S07ZAR	Cable - Shielded USB: Series A Connector, 7 ft. (2m), Straight, BC 1.2	1A	\$35.00
CBA-U45-S15ZAR	Cable - Shielded USB: Power Plus Connector, 15 ft. (4.6m), Straight, 12V	1A	\$100.00
CBA-U44-S15PAR	Cable - Shielded USB: Series A Connector, 15 ft. (4.6m), Straight, 12V (Requires 12V Power Supply)	1A	\$80.00
CBA-U43-S07ZAR	Cable - Shielded USB: Power Plus Connector, 7 ft. (2.8m), Straight, 12V	1A	\$50.00
CBA-U42-S07PAR	Cable - Shielded USB: Series A Connector, 7 ft. (2.8m), Straight, 12V (Requires 12V Power Supply)	1A	\$40.00
CBA-R71-C09ZAR	Cable - RS232: DB9 Female Connector, 9 ft. (2.8m) Coiled, Power Pin 9	1A	\$50.00
CBA-R21-S15PAR	Cable - RS232: DB9 Female Connector, 15 ft. (4.6m) Straight, TxD on 2, 12V (Requires 12V Power Supply)	1A	\$80.00
CBA-R07-S07PAR	Cable - RS232: DB9 Female Connector, 7 ft. (2m) Straight, TxD on 2, 12V (Requires 12V Power Supply)	1A	\$40.00
CBA-M66-S15ZAR	Cable, Auto-Host Detect - IBM: 468x/9x, 15 ft. (4.6m) Straight, Port 9B, 12V	1A	\$110.00
CBA-M65-S07ZAR	Cable, Auto-Host Detect - IBM: 468x/9x, 7 ft. (2m) Straight, Port 9B, 12V	1A	\$80.00
CBA-K65-S15PAR	Cable, Auto-Host Detect - Keyboard Wedge: 15 ft. (4.6m) Straight, PS/2 Power Port, 12V (Requires External Power Supply)	1A	\$36.00
CBA-K63-S07PAR	Cable, Auto-Host Detect - Keyboard Wedge: 7 ft. (2m) Straight, PS/2 Power Port, 12V (Requires 12V Power Supply)	1A	\$30.00
CBA-UF2-C12ZAR	Cable - Shielded USB: Series A Locking Connector for VC70, 12 ft., Coiled, -30C		\$60.00
CBA-UF1-S07ZAR	Cable - Shielded USB: Series A Connector, 7 ft. (2m), Straight, BC 1.2 (High Current), -30C	1A	\$50.00
CBA-UFO-S07PAR	Cable - Shielded USB: Series A Connector, 7 ft. (2m), Straight, 12V (Requires 12V Power Supply), Low Temp -30C	1A	\$50.00
CBA-RF3-C09ZAR	Cable - RS232: DB9 Female Connector, 9 ft. (2.8m) Coiled, Power Pin 9, TxD on 2, True Converter, -30C	1A	\$80.00
CBA-RF2-C09ZAR	Cable - RS232: DB9 Female Connector, 9 ft. (2.8m) Coiled, Power Pin 9, -30C	1A	\$60.00
CBA-RF1-C09PAR	Cable - RS232: DB9 Female Connector, 9 ft. (2.8m) Coiled, TxD on 2, 12V (requires 12V Power Supply), Low Temp -30C	1A	\$65.00
CBA-RF0-S07PAR	Cable - RS232: DB9 Female Connector, 7 ft. (2m) Straight, TxD on 2, 12V (Requires 12V Power Supply), Low Temp -30C	1A	\$60.00

# **Accessories** (continued)

3600 Series Accessories (continued)				
Part Number	Description	Discount Category	List Price	
Battery and Charging Ad	ccessories			
BTRY-36IAB0E-00	Spare Battery, 36XX Series	1A	\$75.00	
SAC3600-4001CR	4-slot Battery Charger for 3600 Series. Includes Power Supply	1A	\$295.00	
PWRS-14000-148R	Power Supply: 100-240 VAC,12VDC,4.16A	1A	\$58.00	
23844-00-00R	AC line cord for PWRS-14000-148R (N. America)	1A	\$10.00	
PWRS-14000-251	Power Supply: 18-75VDC, 12VDC, High	1A	\$325.00	
PWRS-14000-252	Power Supply: 9-30VDC, 12VDC, Low	1A	\$325.00	
CBL-36-452A-01	Power Supply Adapter Cable for -251,252 Supplies	1A	\$30.00	
CBL-DC-451A1-01	DC cable for 3600 series with Filter for Level 6 Power supply	1A	\$20.00	
CBL-36-452A-01	Filter Adapter cable for use w/3600 series cables U42 & UF0	1A	\$15.00	
Miscellaneous				
STND-AS0036-07	Adjustable Intellistand - 36X8 (Twilight Black)	1A	\$75.00	
50-15400-031	Tool Balancer Pulley (existing accessory)	1A	\$143.00	
21-52612-01R	Fork lift holder (existing accessory)	1A	\$125.00	
BRKT-MM0036W-00	Vibration dampening Mounting Plate for STB or FLB	1A	\$75.00	

## **Zebra Global Services**

Zebra's comprehensive portfolio of services is built upon a lifecycle approach to our customers at every phase: Plan, Implement and Run. We help both with their immediate mobility needs and in building successful long-term strategies. Our deep domain expertise in government and enterprise technologies, along with more than 6,100 service professionals and 25,000 world-class channel partners gives us the unique ability to provide our customers with best-in-class solutions. Our services-led solutions for video, network security and resiliency, and next-generation retail can transform technology into powerful solutions.

## **Support Services for the 3600 Series**

Zebra's Global Solutions and Services include the complete portfolio of Support Services, including Zebra OneCare through software support programs.

Seamless integration with Zebra's Support Services team helps ensure ongoing support for your customer's complete solution. Our experienced support engineers are available to assist customers with problem diagnosis and resolution — helping to ensure their mission-critical systems are always up and running at peak performance.

The following support services are available to keep the ultra-rugged 3600 Series operating at peak performance throughout its lifecycle:

Customer Services	Service Description	Time of Purchase	Length of Coverage	Service Part Number
Zebra OneCare Essential	<ul> <li>Multiple years of seamless coverage at a one-time cost</li> <li>Covers: normal wear and tear; internal and external components damaged through accidental breakage</li> <li>Depot repair with 3-day in-house turnaround time for Essential-level service</li> <li>Advance device replacement for</li> </ul>	Up front with the	Three years	SSE-LI3608-30 SSE-LI3678-30
Zebra OneCare Select	Select-level service  Service Dashboard included with Select-level service  24/7 Level one support included with Select-level service  Automatic application of engineering changes  Full access to technical support resources  Rights to download and use software releases and supporting documentation	hardware (prepaid) or within 30 days thereafter		SSS-LI3608-30 SSS-LI3678-30

Note: Refer to Solution Builder for the most up-to-date information, including global pricing.

## **Qualifying Sales Questions**

## Uncover the opportunity and areas where the strengths of the 3600 Series are key selling points

- · Would you like to boost user productivity by deploying a new generation of scanners with unstoppable performance?
- · What barcode symbologies do you need to support? Do you require 2D barcode imaging now or in the future? Do you need to migrate to the new GS1 barcode?
- Do you need to capture barcodes displayed on a computer or mobile phone display?
- How do you currently deal with damaged or smudged barcodes in your environment? Do workers have trouble getting a positive scan on damaged, dirty or frosted labels?
- Do you need to scan barcodes at close as well as long range? Do workers need to scan items/ shelf tags from a distance (i.e. on a high shelf or deep inside a truck)? Position the DS36x8-ER for applications requiring a scanning range greater than 7 ft./2.1 m.
- Do you have multiple types of devices deployed today in order to accommodate your scanning ranges, symbologies and indoor/outdoor environments?
- Do you have labels with multiple barcodes? Would productivity increase if workers could capture up to 20 barcodes with the press of a trigger?
- Do workers need to capture additional information, such as a signature, document or photo for proof of a damaged shipment? Position the DS36x8-HP for these applications.
- Do you need to track parts throughout the supply chain or production process? Position the DS36x8-DP for these applications.
- In what type of environmental conditions will the devices be used? Do workers spend much of their time on the loading dock or warehouse floor where the devices encounter moisture, dust and are dropped/banged repeatedly?

- · Have you experienced problems in the past with damage caused by a drop and would you appreciate a device with an 8 ft. drop spec?
- Do you find environmental issues such as extreme temperature fluctuations, water/moisture humidity an issue with your current scanners?
- Do workers frequently move between the freezer and loading dock? Do you ever experience condensation issues or damage with your existing scanners? Recommend the heated scanner holder for use in freezers.
- Would you like to give your workers cordless scanners but are concerned that Bluetooth will interfere with your Wi-Fi network and production line equipment?
- Is your current cordless scanner battery pool hard to manage?
- · Do workers currently have a way to know the charge status of a cordless scanner?
- Would you appreciate a battery with 50 percent more capacity?
- Does your IT department have a way to know how healthy each and every one of your batteries is? Can they spot and remove aging batteries before they impact worker productivity?
- Do you have a way to remotely upgrade your scanners? How much time is spent staging, configuring, upgrading, managing and troubleshooting your current scanner pool?

## Service-related questions

- What is the impact of downtime on your business?
- Is turnaround time flexible? Is cost more important than turnaround time?
- If we could offer you a service plan that covers your 3600 Series investment from accidental breakage for a one-time upfront cost, would you be interested?
- If we could offer you a service plan that includes next-business-day on-site response, would you be interested?

## **FAQs**

## **General**

## Q Who are the target customers for the **3600 Series?**

The 3600 Series was designed primarily for users in Warehouse and Distribution, Manufacturing Plant Floor and Outdoor Yard and Terminal and rugged outdoor retail use cases. These verticals have a rich history of demanding that their equipment survive in punishing industrial environments, and the 3600 Series is the best performing and most durable scanner they can buy.

## Q Why is the 3600 Series a good choice for rugged use cases?

The Zebra 3600 scanner family is designed for "unstoppable performance" in rugged environments — meaning that each model has been purpose built to take more of a beating over a longer period of time, to scan faster and farther with greater accuracy and increased uptime, and to be deployed faster and managed more efficiently across an enterprise.

## Does the 3600 Series replace any other scanners in the Zebra portfolio?

Yes. Over time the 3600 Series will replace the LS34x8 and DS35x8 scanner lines.

## What is the Warranty on the 3600 Series?

The 3600 Series comes with a 3-year Warranty.

## Will my existing scanner cables work with the **3600 Series?**

No. Cables for the 3600 Series were changed to improve scanner performance and to support the ultra-rugged environments where the 3600 Series scanners can be used. As such, legacy scanner cables are not supported. Enhancements to the new cables include:

- The addition of a rubber gasket to support an IP67 seal
- New materials to make them freezer-compliant
- Improved shielding for better EMI (Electro Magnetic Interference) performance
- Higher power throughput for faster charging of the large capacity battery

## Q What is the price-point of the 3600 series and when will they completely replace the LS3408 and DS35x8 family?

A Despite the fact that the 3600 Series features ultra-rugged design, superior scan performance and unrivaled manageability tools, the scanner family will be priced at or below that of comparable legacy rugged scanner models. As for the transition from these legacy models, we anticipate that adoption of the 3600 Series platform will be swift. Once a steady supply chain has been achieved, you can expect an aggressive end-of-life plan for the LS3408 and DS35x8 family. We expect some models will reach end of sale before the end of 2016.

#### Q Why is the 3600 Series green?

Aside from the aesthetic reasons that it looks good and stands apart from other devices in its class, the "Industrial Green" color was selected because it is highly visible in both well lit and poorly lit environments. This isn't subjective: years of research into the design of public safety products determined this to be the case. The vibrant color is easy to spot regardless of lighting conditions, in cluttered environments where cordless scanners could easily be misplaced, and in environments where it is too noisy to use the paging feature.

## Q Can both corded and cordless be used in freezer applications?

Yes, both corded and cordless models can be used in the freezer. The third party optional heated scanner holder accessory can extend the term of use in the freezer and mitigate the appearance of condensation on the scanners.

#### Q What makes the 3600 Series "unstoppable"?

The Zebra 3600 scanner family is purpose built to take more of a beating over a longer period of time. to scan faster and farther with greater accuracy and increased speed, and to be deployed faster and managed more efficiently across an enterprise. This marriage of ultra-rugged design, superior performance and unrivaled manageability make every 3600 Series model unstoppable.

## Q You haven't announced availability of a long range laser-based scanner for the 3600 Series to replace the LS3408-ER. Is Zebra finally exiting the laser scanner space?

No. After extensive research & development that included discussions with our customer base about their long range needs, we learned that the most important features are a) extended working range and b) lightning fast time to decode. The technology platform, be it laser-based or otherwise, was not important. Based on those findings, our top priority was to release the best performing long-range imager as quickly as possible. That's why our first Extended Range (ER) scanner will be based on 2D imaging technology. That said, our roadmap for the 3600 Series does include a laser-based long range scanner with a release date after 2016. In the meantime, the LS3408-ER long range 1D scanner is still the go-to device for long range 1D scanning and will remain so for some time.

## Q Some models are in Solution Builder today but others are not. Why is that?

A 3600 Series models will appear in Solution Builder as they are released and achieve FCS (First Customer Shipment). We do expect all models in the 3600 family to achieve FCS by the end of 2016.

## **Q** Why do I need 30 percent more working range?

Working range measures the scanner's distance from a barcode. The 3600 Series delivers at least 30 percent more working range than competitive devices, capturing bar codes from a variety of distances as fast as workers can pull the trigger for significant productivity improvements over the course of a shift.

#### Q Will legacy rugged accessories work with the 3600 series?

A Some will, but most will not because the physical geometry of the 3600 Series differs from the 3400/3500 series. Some accessories can be reused, such as the tool balancer pulley and forklift holders, but cradles and stands are not mechanically compatible.

## Q The 3600 Series SR and HP models appear to have a similar feature set. Why is that and how do our partners and customers benefit from it?

A Our customers have asked for capabilities that can only be achieved by offering two models (the SR and HP). Both are exceptionally fast barcode scanners, but the SR excels at reading closer to the scanner exit window, while the HP excels at reading farther away to meet rugged use cases for a longer read range. Additionally, the HP supports non-barcode applications such as OCR reading, image and picture taking applications, and it is also the model best suited for Intelligent Document Capture.

## Q What is "Wi-Fi friendly mode" and how does it work?

Zebra's Wi-Fi Friendly Mode eliminates the wireless interference that Bluetooth devices can often create in Wi-Fi environments because both technologies operate in the same frequency band. Wi-Fi friendly mode is accomplished via a combination of innovative technologies called Adaptive Frequency Hopping, Automatic Power control, and intelligent link management, assuring that use of Bluetooth enabled 3600 Series cordless scanners in a Wi-Fi environment will not interfere with Wi-Fi devices.

## Q Does the 3600 Series include a "Fuzzy Logic" feature like the 3500 series did?

A Yes, fuzzy logic technology has been incorporated into the 3600 Series to help deliver its superior scan performance. This is now accomplished with Zebra's PRZM intelligent imaging technology, which includes the ability to read poorly printed, torn, damaged, or truncated codes at further distances, and Zebra does this better than anyone else.

## **Rugged Design**

## Q Why do corded 3600 Series scanners have a -30°C cold temperature rating but the cordless versions only -20°C?

A In extremely cold temperatures, the cordless scanner's battery voltage drops significantly when any kind of current is drawn from it, reducing its capacity to an unusable level.

#### Q Why do I need an 8 ft. Drop Spec?

Today's warehouses maximize the use of their square footage, not just horizontally but vertically, making the potential for higher drops very real. Drops to concrete from a forklift, lift operator or even from warehouse mezzanines occur on a regular basis, often times while reaching high overhead to scan a stacked pallet and often from heights higher than 6.5 ft./2 m. Further, a scanner built to withstand drops from 8 ft./2.4 m will last longer than a scanner built to withstand drops from 6.5 ft./2 m, lowering the total cost of ownership across the scanner enterprise.

## Q Why is IP67 important?

A Because water and electrical components don't mix, and sometimes water resistance just isn't good enough. 3600 Series scanners are built to be dustproof, sprayproof and waterproofed to IP67, meaning that they can operate in dirty, dusty environments, sprayed down with jetting water and even submersed in water for up to 30 minutes without performance being affected.

## Q What is the purpose of the separate plastic assembly on top of the scanner?

The top assembly acts as a "hard hat" for the scanner head. This piece is made of a tough polycarbonate material to protect the main housing and absorb hits rather than damaging the brains of the device.

## Management utilities and software

## Q What types of scanner management utilities and software are available for the 3600 Series? Where can I find detailed information?

- A Zebra offers a complete set of software tools for device configuration, remote management and application development that may be used with the series:
  - 123Scan<sup>2</sup>: 123Scan<sup>2</sup> is a free, PC-based software tool for the configuration of Zebra/ Symbol scanners. It can upgrade scanner firmware, check online for software updates, generate a multi-setting bar code for single

- scan programming, stage large number of scanners simultaneously, capture images, generate reports with asset tracking information and create custom products. www.zebra.com/123Scan2
- Scanner Management Service: The Scanner Management Service (SMS) is a free PC-based software tool that enables the remote management of Zebra/Symbol scanners. The SMS enables you to remotely access scanner asset information and statistics, set parameters and update firmware. The ability to manage your scanner fleet from a remote location dramatically reduces the costs of owning a scanner. https://www.zebra.com/SMS
- SDK for Application Development: The Windows SDK for Zebra/Symbol scanners enables the easy creation of fully featured scanner applications. In addition to capturing bar code data, the SDK enables you to capture images, easily set parameters and more. http://www.zebra.com/ ScannerSDKforWindows

## Q How do I remotely manage the 3600 Series battery?

3600 Series batteries are remotely managed on Windows PCs using Zebra's Scanner Management Service (SMS). The SMS client, loaded on the host PC, can be queried by any 3rd party WMI enabled console or controlled through a command line script.

## Q How do I easily demonstrate battery management on the 3600 Series?

- The 3600 Series decode statistics and battery statistics can be managed locally using 123Scan through its statistics view (start screen / Actions / View statistics from USB Scanner).
- Q Does 123Scan<sup>2</sup> integrate with SOTI's MobiControl and Zebra's OVS (Operational Visibility Solutions software tools?
- A No. At this time, 123Scan<sup>2</sup> for the 3600 Series is not compatible with SOTI's MobiControl and Zebra's OVS tools.

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