

## SPECIFICATION SHEET

ZEBRA 3600 ULTRA-RUGGED SERIES:  
DS3608-DPX/DS3678-DPX CORDED AND CORDLESS DPM 2D IMAGER



# DS3608-DPX/DS3678-DPX Ultra-Rugged Scanner

Unstoppable performance for direct part marks (DPM) and 1D/2D barcodes

Every day, workers on the manufacturing plant floor scan thousands of direct part marks required to protect product quality and user safety — and meet end-to-end product traceability regulations. Their productivity depends on the quality of the scanner you put in their hands. With the corded DS3608-DPX and cordless DS3678-DPX imagers, you can give them the best — unmatched rugged design, unmatched scanning performance and unrivaled manageability. Advanced scanning delivers lightning-fast capture of direct part marks, plus any 1D or 2D barcode printed on a label in virtually any condition. The ultra-rugged design is practically indestructible — ideal for punishing environments. The scanners couldn't be easier and less time-consuming to deploy and manage. And when it comes to cordless technology, the DS3678-DPX is loaded with Zebra-only features that put it in a class of its own. The DS3608-DPX/DS3678-DPX — the unstoppable performance you need to maximize workforce productivity and throughput, ensure traceability, reduce production cycle times and prevent unplanned production line downtime.



### Superior scanning performance on DPM and standard 1D/2D barcodes

Comprehensive patented features enable the capture of direct part marks (DPM) and printed 1D/2D barcode. Ideally suited for capturing clean laser-etched direct part marks on matte-finished surfaces, the DS3608-DPX/DS3678-DPX also captures dot peen, as well as laser etch, ink mark, chemical etch, inkjet mold, cast and thermal spray. The same scanner can capture barcodes printed on labels in virtually any condition — including damaged, dirty, poorly printed or under shrinkwrap. This dual functionality provides excellent value: you get one scanner you can use on the production line for end-to-end track and trace of materials — and in the warehouse from receiving to shipping.

### Ultra-rugged — the most indestructible design in its class

The DS3608-DPX/DS3678-DPX is our most rugged scanner yet, with the highest drop, tumble and sealing specification in its class. The DS3608-DPX/DS3678-DPX is built to survive an 8 ft./2.4 m drop to concrete — 23 percent more durable than any other scanner in this class. The scanners operate reliably after 5,000 tumbles, simulating the real-world tumbling that occurs with a drop. Both models are dust proof, spray proof and waterproof to IP67 — they can be sprayed down with jetting water and even submersed in water.

### Easy management with our complimentary industry-best tools

Remotely configure scanners, upgrade firmware, format data properly for your back end and monitor PowerPrecision+ battery statistics and more with 123Scan and Scanner Management Service (SMS).

### Extreme temperature rating

Built to handle extreme cold, heat and humidity, you can use the DS3608-DPX and DS3678-DPX anywhere — even in the freezer\*.

### A Bluetooth model in a class of its own for superior cordless freedom

Bluetooth 4.0 (Low Energy) provides lightning fast wireless communication and maximum energy efficiency.

Our Zebra *Wi-Fi Friendly Mode* eliminates the wireless interference that Bluetooth devices can create in your Wi-Fi environment.

The *'go anywhere' rugged cradle* offers superior versatility and durability. The DS3678-DPX is the only scanner in its family to offer a cradle with IP65 sealing. And its industrial charging contacts withstand 250,000 insertions.

The *first-in-its-class battery 'charge gauge'* and Bluetooth status LED make it easy to monitor battery power as well as Bluetooth connectivity.

The *PowerPrecision+ battery* delivers the ultimate in battery power and management. You get more than three times the amount of scans per charge than with competitive models in this product class — more than 100,000 scans per charge, so workers can scan more items over a longer period of time. You also get visibility into a wealth of battery health-related data, including charge cycles consumed, current battery status and a State of Health meter, which identifies if batteries are healthy and holding a full charge or ready for retirement.

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### Faster pick-list processing

Users can easily select and capture an individual barcode from any pick list.

### Three flexible feedback modes

Mix and match the feedback modes that are ideal in your environment — vibration, red and green LEDs located in an area where they are always easy to see, plus the traditional loud beep tone.

### DataCapture DNA

Zebra's DataCapture DNA is a technology platform of highly intelligent firmware, software, utilities and apps exclusively engineered for Zebra scanners.

Leveraging more than 35 years of Zebra's industry expertise, DataCapture DNA delivers innovations that give our best-in-breed imagers greater intelligence and simplicity. When combined with the unstoppable performance found in every 3600 Series ultra-rugged scanner, DataCapture DNA turns Zebra's 3600 Series scanners into powerful tools that help to resolve tomorrow's data capture challenges today — and help your workers get more done each day.

## The Zebra 3600 Ultra-Rugged Scanner Series

**This family of scanners offers a model to meet virtually every need in warehousing and manufacturing:**

- **LI3608-SR/LI3678-SR:**  
Standard range 1D barcode capture
- **LI3608-ER/LI3678-ER:**  
All-range 1D barcode capture
- **DS3608-SR/DS3678-SR:**  
Standard range scanning of 1D and 2D barcodes
- **DS3608-HP/DS3678-HP:**  
High performance scanner captures 1D/2D barcodes over longer distances, plus OCR, photos and documents
- **DS3608-HD/DS3678-HD:**  
Captures high-density 1D/2D barcodes
- **DS3608-DP/DS3678-DP:**  
Capture of Direct Part Marks (DPM)
- **DS3608-DPX/DS3678-DPX:**  
Capture clean laser-etched Direct Part Marks on matte-finished surfaces
- **DS3608-ER/DS3678-ER:**  
All-range 1D/2D barcode capture

**The DS3608-DPX/DS3678-DPX — Streamline end-to-end product traceability and reduce production cycle times with the ultra-rugged scanner that redefines reliability.**

For more information, visit [www.zebra.com/ds36x8-dpx](http://www.zebra.com/ds36x8-dpx) or access our global contact directory at [www.zebra.com/contact](http://www.zebra.com/contact)

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# DS3608-DPX/DS3678-DPX Specifications Chart

Physical Characteristics	
<b>Dimensions</b>	Corded: 7.3 in. H x 3.0 in. W x 5.2 in. D 18.5 cm H x 7.7 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 7.7 cm W x 14.3 cm D
<b>Weight</b>	Corded: 10.72 oz./304 g Cordless: 14.18 oz./402 g
<b>Input Voltage Range</b>	Host powered: 4.5 VDC min., 5.5 VDC max. External power supply: 11.4 VDC min., 12.6 VDC max.
<b>Operating Current</b>	DS3608-DP (corded): 360 mA (RMS typical)
<b>Standby Current</b>	DS3608-DP (corded): 100 mA (RMS typical)
<b>Color</b>	Industrial Green
<b>Supported Host Interfaces</b>	USB, RS232, Keyboard Wedge
<b>Battery</b>	PowerPrecision+ 3100 mAh Li-Ion rechargeable battery
<b>User Indicators</b>	Direct decode indicator; LEDs; beeper; vibration
Performance Characteristics	
<b>Scans per Full Charge</b>	100,000+
<b>Image Capture</b>	Basic
<b>Illumination</b>	Direct: Two (2) warm white light LED ;
<b>Aimer</b>	655 nm laser
<b>Imager Field of View</b>	Horizontal: 31°, Vertical: 23°
<b>Image Sensor</b>	1,280 x 960 pixels
<b>Minimum Print Contrast</b>	15% minimum reflective difference
<b>Skew/Pitch/Roll</b>	Skew: ± 60° Pitch: ± 60° Roll: ± 360°
Decode Capabilities**	
<b>1D</b>	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)
<b>2D</b>	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Chinese Sensible (Han Xin), Postal Codes
<b>IUID Support</b>	Supports IUID parsing, the ability to read and separate IUID fields per application requirements
User Environment	
<b>Operating Temp.</b>	Corded: -22° F to 122° F/-30° C to 50° C Cordless: -4° F to 122° F/-20° C to 50° C
<b>Storage Temp.</b>	-40° F to 158° F/-40° C to 70° C
<b>Humidity</b>	5% to 95% non-condensing
<b>Drop Specification</b>	Withstands multiple 8.0 ft./2.4 m drops to concrete

User Environment (Continued)	
<b>Tumble Specification</b>	5000 tumbles @ 3.3 ft. (1 m)
<b>Sealing</b>	Scanner: IP65 and IP67 FLB cradle: IP65
<b>ESD</b>	Per EN61000-4-2, ±20 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge
<b>Ambient Light Immunity</b>	0 to 10,037 Foot Candles/0 to 108,000 Lux (direct sunlight)
Utilities and Maintenance	
<b>123Scan</b>	Programs scanner parameters, upgrades firmware, provides scanned barcode data and prints reports. For more information, visit <a href="http://www.zebra.com/123scan">www.zebra.com/123scan</a>
<b>Scanner SDK</b>	Generates a fully-featured scanner application, including documentation, drivers, test utilities and sample source code. For more information, visit <a href="http://www.zebra.com/windowssdk">www.zebra.com/windowssdk</a>
<b>Scanner Management Service (SMS)</b>	Remotely manages your Zebra scanner and queries its asset information. For more information, visit <a href="http://www.zebra.com/sms">www.zebra.com/sms</a>
<b>Network Connect</b>	Seamlessly connects 3600 Series scanners directly to your Industrial Ethernet network without any third party conversion equipment. For more information, visit <a href="http://www.zebra.com/NetworkConnect">www.zebra.com/NetworkConnect</a>
Wireless Connectivity	
<b>Bluetooth Radio</b>	Bluetooth Class 1, Version 4.0 (LE), serial port (SPP) and HID profiles
<b>Data Rate</b>	3 Mbit/s (2.1 Mbit/s) for Classic Bluetooth 1 Mbit/s (0.27 Mbit/s) for Low Energy
<b>Radio Range</b>	Direct line of sight in open air: Class 1: Minimum 300 ft. (100.0 m); Class 2: Minimum 30 ft. (10.0 m)
Regulatory	
<b>Environmental</b>	RoHS EN 50581: 2012
<b>Electrical Safety</b>	<b>EU Safety:</b> EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + AC 2011 + A2: 2013; <b>International Safety:</b> IEC 60950-1: 2005 + A1: 2009 + A2: 2013 <b>US/Canada Safety:</b> UL 60950-1, second edition, CAN/CSA-C22.2 No. 60950-1-07
<b>Laser/LED Safety</b>	Exempt Risk Group LED per IEC/EN 62471 (Ed 1) Class 2 Laser per IEC/EN 60825-1 (Ed 3) Complies with 21CFR1040.10
<b>EMI/RFI</b>	<b>IT Emissions:</b> EN 55022: 2010/AC: 2011 (Class B); <b>IT Immunity:</b> EN 55024: 2010; <b>Heavy Industrial:</b> EN 61000-6-2: 2005/AC:2005; <b>Harmonic Current Emissions:</b> EN 61000-3-2: 2006 + A1: 2009 + A2: 2009 (Class B); <b>Voltage Fluctuation and Flicker:</b> EN 61000-3-3: 2013; <b>Medical Electrical Equipment:</b> EN 60601-1-2: 2007/AC: 2010, IEC 60601-1-2: 2007 (Modified); <b>Radio Frequency Devices:</b> 47 CFR Part 15, Subpart B, Class B <b>Digital Apparatus:</b> ICES-003 Issue 5, Class B

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## DS3608-DPX/DS3678-DPX Specifications (continued)

DataCapture DNA	
<b>PRODUCTIVITY TOOLS</b>	
PRZM Intelligent Imaging	Multi-code Data Formatting
Wi-Fi™ Friendly Mode	Preferred Symbol
<b>MANAGEMENT TOOLS</b>	
123Scan	Remote Management
PowerPrecision+	
<b>VISIBILITY TOOLS</b>	
Remote Diagnostics	ScanSpeed Analytics
<b>DEVELOPMENT TOOLS</b>	
Scanner Control Application	Software Development Kit
Scan-to-Connect	
For more information about DataCapture DNA and its applications, please visit <a href="http://www.zebra.com/datacapturedna">www.zebra.com/datacapturedna</a>	

Decode Ranges	
Symbology/Resolution	Near/Far
Code 39: 3.0 mil	0.5-4.7 in./1.3-11.9 cm
Code 39: 5.0 mil	0.2-5.6 in./0.5-14.2 cm
PDF417: 6.6 mil	0.1-4.0 in./0.3-10.2 cm
Datamatrix: 5.0 mil	1.2-2.9 in./3.0-7.4 cm
Datamatrix: 10.0 mil	0.1-4.9 in./0.3-12.5 cm
QR: 10.0 mil	0.1-4.8 in./0.3-12.2 cm
100% UPC: 13.0 mil	***0.4-9.6 in./***1.0-24.4 cm
C128: 15.0 mil	***3.3-10.0 in./***8.4-25.4 cm

**Warranty**

Subject to the terms of Zebra’s hardware warranty statement, the DS3608-DPX/DS3678-DPX is warranted against defects in workmanship and materials for a period of: Scanner and Cradle: thirty-six (36) months, Battery twelve (12) months from the date of shipment. For complete warranty statement, go to: <http://www.zebra.com/warranty>

**Recommended Services**

Zebra *OneCare* Select; Zebra *OneCare* Essential

\* Heated scanner holder accessory recommended to reduce condensation on the outside of scan window when moving in and out of freezers.  
\*\* Refer to Product Reference Guide for complete list of symbologies.  
\*\*\* FOV/barcode width limited; Decode ranges measured with DPM Mode OFF, photographic paper barcodes, under 30fcd ambient light conditions



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