DS3608-ER/DS3678-ER Ultra-Rugged Scanner

Unstoppable performance for extended range 1D/2D barcode scanning

The productivity of your warehouse and manufacturing workers depends on the quality of the scanner they use. The corded DS3608-ER and cordless DS3678-ER scanner enable them to reliably scan 1D and 2D barcodes near and far—and they offer unmatched ultra-rugged design, scanning performance and manageability. The advanced imager delivers lightning-fast capture of any 1D or 2D barcode printed on a label in virtually any condition or displayed on a screen, nearer and farther than any scanner in this class from 3 in./7.6 cm to 70 ft./21.4 m away. The ultra-rugged DS3608-ER/DS3678-ER is practically indestructible and deployment and management are simple and fast. The DS3678-ER's unique features put it in a class of its own among cordless scanners, including a sealed rugged cradle, a smart battery and Zebra's Wi-Fi Friendly Mode that prevents interference with your Wi-Fi network. The DS3608-ER/DS3678-ER—the performance you need to maximize workforce productivity and operational throughput.



Superior Scanning Range

The advanced imager 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). Now, one scanner 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. The result? Workers can capture barcodes as fast as they can pull the trigger for first-time every time scanning—and extraordinary productivity.

Ultra-Rugged—the Most Indestructible Design in its Class

The DS3608-ER/DS3678-ER is our most rugged scanner yet, with the highest drop, tumble and sealing specification in its class. The DS3608-ER/DS3678-ER 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 DS3608-ER/DS3678-ER operates 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).

Multi-Code Captures and Processes up to 20 Barcodes Simultaneously

Many labels have multiple barcodes your workers need to capture. Now, one press of the trigger captures the right barcodes and applies the unique data format required for each one for instant

The DS3608-ER/DS3678-ER—give your workers single scanner simplicity for near and far barcode capture with the ultra-rugged scanner that redefines reliability. For more information, visit www.zebra.com/DS36X8-ER or access our global contact directory a www.zebra.com/contact



transmission to your backend systems—all with complete control over the order barcodes are processed.

Faster Pick-List Processing

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

Ready for the Freezer

The DS3608-ER and DS3678-ER are built from the ground up to handle extreme cold. Their unique plastics, cables and components are designed to handle freezing temperatures without becoming brittle—making these scanners ideal for use in freezers and outdoor yards.*

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-ER 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 nine times the amount of scans per charge than with competitive models in this product class—more than 70,000 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.

Support for the Barcode of the Future—Digimarc®

DS3608-ER/DS3678-ER scanners support Digimarc digital watermark technology, where barcodes are printed repeatedly over all surfaces yet are invisible to workers and consumers. Digimarc saves time at checkout and also creates efficiencies throughout the supply chain since workers no longer need to locate and position a visible barcode in the field of view.

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.

Instantly Connect to Your Industrial Ethernet Network

Zebra's Network Connect for Automation delivers a seamless connection between DS3608-ER/ DS3678-ER scanners and a manufacturer's Industrial Ethernet network without the need for third party conversion equipment. The solution eliminates vulnerability points, improves security, reduces complexity and is compatible with every Zebra 3600 Series scanner.

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.

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 7.7 cm W x 14.2 cm D		
Weight	Corded: 11.8 oz./334 g Cordless: 15.38 oz./436 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-ER (corded): Near: 360mA (RMS typical) Far: 800mA (RMS typical) DS3608-ER (corded, in 500mA Compatibility Mode): Near: 245mA (RMS typical) Far: 410mA (RMS typical)		
Standby Current	DS3608-ER (corded): 100 mA (RMS typical)		
Color	Industrial Green		
Supported Host Interfaces	USB, RS232, Keyboard Wedge Industrial Ethernet: EtherNet/IP, Profinet, Modbus TCP & Std TCP/IP		
Battery	PowerPrecision+ 3100 mAh Li-lon rechargeable battery		
User Indicators	Direct decode indicator; LEDs; beeper; vibration		
Performance Charac	cteristics		
Scans per Full Charge	70,000+		
Image Capture	Basic		
Aimer	655 nm laser		
Illumination	One 660 nm LED		
Imager Field of View	Near: 32° (H) x 20° (V); Far: 12° (H) x 7.6° (V)		
Image Sensor	1,280 x 800 (1 Megapixel)		
Minimum Print Contrast	25% minimum reflective difference		
	Skew: ± 60°		
Skew/Pitch/Roll	Pitch: ± 60° Roll: ± 360°		
Skew/Pitch/Roll Decode Capabilities	Roll: ± 360°		
	Roll: ± 360°		
Decode Capabilities	Roll: ± 360° ** Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5,		
Decode Capabilities	Roll: ± 360° ** 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) PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR,		
Decode Capabilities 1D 2D	Roll: ± 360° ** Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GSI DataBar, Base 32 (Italian Pharma) PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Chinese Sensible (Han Xin), Postal Codes		
Decode Capabilities 1D 2D Digimarc	Roll: ± 360° ** 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) PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Chinese Sensible (Han Xin), Postal Codes Digital watermark technology Supports IUID parsing, the ability to read and		
Decode Capabilities 1D 2D Digimarc IUID Support	Roll: ± 360° ** 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) PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Chinese Sensible (Han Xin), Postal Codes Digital watermark technology Supports IUID parsing, the ability to read and		
Decode Capabilities 1D 2D Digimarc IUID Support User Environment	Roll: ± 360° ** 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) PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Chinese Sensible (Han Xin), Postal Codes Digital watermark technology Supports IUID parsing, the ability to read and separate IUID fields per application requirements Corded: -22° F to 122° F/-30° C to 50° C		

User Environment (continued)	
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
Ambient Light Immunity	0 to 10,000 Foot Candles/0 to 107639 Lux (direct sunlight)
Utilities and Mainter	nance
123Scan	Programs scanner parameters, upgrades firmware provides scanned barcode data and prints reports For more information, visit 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 www.zebra.com/windowssdk
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and querie its asset information. For more information, visit www.zebra.com/sms
Network Connect	Seamlessly connects 3600 Series scanners directly to your Industrial Ethernet network withou any third party conversion equipment. For more information, visit www.zebra.com/NetworkConnec
Wireless Connectivi	ty
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)
Decode Ranges	
Symbology/Resolution	Near/Far
Code 128: 15 mil	5.0-100.0 in./12.7-254.0 cm
Code 128: 40 mil	3.5-260.0 in./8.9-660.4 cm
Code 128: 100 mil	20-840.0 in./50.8-2133.6 cm
Data Matrix: 10 mil	4.0-44 in./10.1-111.76 cm
Data Matrix: 200 mil	10-500 in./25.4-1270.0 cm
Regulatory	
Environmental	RoHS EN 50581: 2012
Electrical Safety	EU Safety: EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + AC 2011 + A2: 2013; International Safety: IEC 60950-1: 2005 + A1: 2009 + A2: 2013 US/Canada Safety: UL 60950-1, second edition, CAN/CSA-C22.2 No. 60950-1-07

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-ER/ DS3678-ER: All-range 1D/2D barcode capture

Specifications

Regulatory (continued)	
Laser/LED Safety	Complies with 21 CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice NO. 50, dated June 24, 2007 and IEC/EN 60825-1:2007 and/or IEC/EN 60825-1:2014
EMI/RFI	IT Emissions: EN 55022: 2010/AC: 2011 (Class B); IT Immunity: EN 55024: 2010; Heavy Industrial: EN 61000-6-2: 2005/AC:2005; Harmonic Current Emissions: EN 61000-3-2: 2006 + A1: 2009 + A2: 2009 (Class B); Voltage Fluctuation and Flicker: EN 61000-3-3: 2013; Medical Electrical Equipment: EN 60601-1-2: 2007/ AC: 2010, IEC 60601-1-2: 2007 (Modified); Radio Frequency Devices: 47 CFR Part 15, Subpart B, Class B Digital Apparatus: ICES-003 Issue 5, Class B

Warranty

Subject to the terms of Zebra's hardware warranty statement, the DS3608-ER/ DS3678-ER 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 the scan window when moving in and out of freezers.

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

Datacapture DNA

For more information about DataCapture DNA and its applications, please visit www.zebra.com/datacapturedna





NA and Corporate Headquarters +1 800 423 0442 inquiry4@zebra.com Asia-Pacific Headquarters +65 6858 0722 contact.apac@zebra.com EMEA Headquarters zebra.com/locations contact.emea@zebra.com Latin America Headquarters +1 786 245 3934 la.contactme@zebra.com

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