

DS3600-SR Ultra-Rugged Scanner

Unstoppable performance for standard range 1D/2D barcode capture

The productivity of your warehouse and manufacturing workers depends on the quality of their scanners. The DS3600-SR Ultra-Rugged scanner enables reliable capture of 1D and 2D barcodes at standard ranges—from near contact to nearly 5 ft./1.5 m away. Built for your toughest environments, the DS3600-SR is virtually indestructible, including an enhanced 10 ft./3 m drop spec to concrete and dual IP65/IP68 sealing. With DataCapture DNA, Zebra's exclusive software ecosystem, you can take scanner performance far beyond the basics—simplifying every stage of the scanning experience over the life of your device. And when it comes to cordless technology, the DS3678-SR's Zebra-only features put it in a class of its own. The DS3600-SR—the unstoppable performance you need to maximize workforce productivity and throughput in your operations.



Performs In Your Toughest Environments

Scan it All—at Astonishing Speeds

Workers can capture virtually any 1D or 2D barcode as fast as they can pull the trigger, whether they're in hand or as far as 5 ft./ 1.5 m away—faster and farther than other standard range scanners. Powered by Zebra's exclusive PRZM Intelligent Imaging technology and the highest sensor resolution in its class, the DS3600-SR instantly captures the most problematic barcodes—including barcodes that are dirty, damaged, poorly printed and under shrinkwrap.

Ultra-Rugged—the Most Indestructible Design in its Class

Zebra ultra-rugged scanners earned their name for a reason—you won't find a tougher family of scanners. Ready for the world's harshest environments, the DS3600-SR has the highest drop, tumble and sealing specifications in its class. It can survive 10 ft./3 m drops to concrete and 7,500 tumbles. With dual IP65/IP68 sealing, the DS3600-SR is dust proof, can handle the force of jetting water and be fully submerged in water. Built to withstand extreme heat, cold and humidity, the DS3600-SR can be used anywhere—indoor, outdoor and even in the freezer.1

Ultra-Rugged Cradle and Charging Contacts Designed to Last The DS3600-SR is the first scanner in its class to offer a cradle with IP65 sealing. Its industrial charging contacts withstand 250,000

insertions. And Zebra's exclusive Connect+ Contact technology assures reliable, corrosion-free charging over the life of the scanner.

Easily Capture Label Data for Better Inventory Management With Label Parse+, the DS3600-SR can instantly capture and

parse GS1 label barcode data on items, enabling workers to easily capture a wealth of data, including expiration dates and lot number/ manufacturing location.

Read Up To 20 Barcodes with One Press of the Scan Trigger

With Multi-Code Data Formatting (MDF), the DS3600-SR can capture multiple barcodes with a single scan and transmit only the barcodes you need, in the order your application expects.

Faster Pick-List Processing

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

Flexible Feedback Modes

Mix and match the feedback modes that best fit your environment vibration, wraparound LEDs that are easy to see from any position, a beep tone and Zebra's Direct Decode Indicator that projects illumination on the captured barcode.

Support for the Barcode of the Future—Digimarc®

DS3600-SR 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.

Superior Cordless Technology

More Than 100,000 Scans on a Single Charge

The PowerPrecision+ battery delivers the ultimate in battery power and management. You get more than twice the amount of scans per charge than with competitive models, 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, no longer holding a full charge, or at end of life and require replacement.

Battery and Bluetooth® Status At-A-Glance

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

Switch Workflows in an Instant with AutoConfig

Since scanner settings are stored in the cradle base, simply pair the DS3600-SR to a different base to automatically configure it for a new host application. For example, you can take a scanner from the forklift and use it for shipping without manually changing settings.

Keep Track of Your Scanners and Prevent Workflow Interruptions

With Virtual Tether, you won't have to worry about a warehouse worker leaving a scanner behind on a pallet. Both the scanner and cradle will alert users when a scanner is taken beyond its Bluetooth range or left out of the cradle for a predefined length of time.

Eliminate Bluetooth interference with Wi-Fi Friendly Mode

Zebra's exclusive Wi-Fi Friendly Mode eliminates the wireless interference that Bluetooth devices can create in your Wi-Fi environment.

Unrivaled Manageability

Instantly Connect to Your Industrial Ethernet Network

Zebra's Network Connect for Automation delivers a seamless connection between DS3600-SR 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.

Identify and Correct Problem Barcodes with ScanSpeed Analytics

Only from Zebra, ScanSpeed Analytics provides detailed metrics on every barcode captured—enabling you to identify poor performing barcodes that slow down your operations.

No-Cost Tools to Meet Your Management Needs

With 123Scan, you can easily create configuration barcodes to program scanners. If your imagers are in multiple locations across the country or around the world, with Scanner Management Service (SMS), you can configure and update the firmware for any DS3600-SR device that is plugged into the host—no depot staging or user action is required.

Up-To-The-Minute Insight Into Every Aspect of Your Scanners

The logging agent's Remote Diagnostics capabilities automate the recording of scanner asset information, health and statistics, configuration settings and barcode data—giving you the information needed for event verification, blockchain traceability, pilot site ROI generation, troubleshooting and predictive fleet-wide trend analysis.

Physical Characteris	stics
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: 10.76 oz./305 g Cordless: 14.34 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): 360 mA (RMS typical)
Standby Current	DS3608-SR (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-Ion rechargeable battery
User Indicators	Direct decode indicator; LEDs; beeper; vibration
Performance Chara	cteristics
Scans per Full Charge	100,000+
Image Capture	Basic
Illumination	One (1) 660 nm LED
Aimer	610 nm 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 Capabilities	2
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
Digimarc	Digital watermark technology
IUID Support	Supports IUID parsing, the ability to read and Separate IUID fields per application requirements
User Environment	
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% non-condensing
Drop Specification	DS36X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature DS3678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C DS3608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -30° C to 50° C

Tumble Specification	7500 3.3 ft./1.0 m tumbles
Sealing	Scanner: IP65 and IP68 per applicable IEC sealir specifications FLB cradle: IP65
ESD	Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge
Utilities and Mainte	nance
123Scan	Programs scanner parameters, upgrades firmwa provides scanned barcode data and prints repor For more information, visit www.zebra.com/123Scan
Scanner SDK	Generates a fully-featured scanner application, including documentation, drivers, test utilities ar sample source code. For more information, visit www.zebra.com/windowsSDK
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and quer its asset information. For more information, visit www.zebra.com/sms
Network Connect	Seamlessly connects 3600 Series scanners directly to your Industrial Ethernet network without any third-party conversion equipment. For more information, visit www.zebra.com/NetworkConn
Wireless Connectiv	ity
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: Minimum 300 ft. (100.0 m); Class 2: Minimum 30 ft. (10.0 m
Decode Ranges (Ty	pical) ³
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
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
LED Safety	International LED Safety: IEC 62471: 2006 (Ed.1.0

The Zebra 3600 **Ultra-Rugged Scanner Series**

- LI3600-SR: Standard range 1D barcode capture
- LI3600-ER: Extended range 1D barcode capture
- DS3600-SR: Standard range scanning of 1D and 2D barcodes
- DS3600-HP: High-performance scanner captures 1D/2D barcodes over longer distances, plus OCR, photos and documents
- DS3600-HD: Captures high-density 1D/2D barcodes
- DS3600-DP: Capture of Direct Part Marks (DPM)
- DS3600-ER: Extended range 1D/2D barcode capture
- DS3600-DPA: Optimized to read Direct Part Marks (DPM) and wide 1D barcodes
- DS3600-KD: Versatility of a keypad and color display

Regulatory (continued)

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

Warrantv

FMI/RFI

Subject to the terms of Zebra's hardware warranty statement, the DS3608-SR/ DS3678-SR 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

Footnotes

- 1. Heated scanner holder accessory recommended to reduce condensation on the outside of scan window when moving in and out of freezers.
- 2. Refer to Product Reference Guide for complete list of symbologies. Specifications are subject to change without notice.
- 3. Printing resolution, contrast, and ambient light dependent.

Datacapture DNA



















































DS3600-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 their scanners. The DS3600-ER Ultra-Rugged scanner enables extended range capture of 1D and 2D barcodes—nearer and farther than any scanner in this class, from 3 in./7.6 cm to 70 ft/21.4 m away. Built for your toughest environments, the DS3600-ER is virtually indestructible, including an enhanced 10 ft./3 m drop spec to concrete and dual IP65/IP68 sealing. With DataCapture DNA, Zebra's exclusive software ecosystem, you can take scanner performance far beyond the basics—simplifying every stage of the scanning experience over the life of your device. And when it comes to cordless technology, the DS3678-ER's Zebra-only features put it in a class of its own. The DS3600-ER—the unstoppable performance you need to maximize workforce productivity and throughput in your operations.



Performs in Your Toughest Environments

Superior Scanning Range

Powered by Zebra's exclusive PRZM Intelligent Imaging technology, the DS3600-ER reads 1D and 2D barcodes printed on a label up to 60% closer and 35% farther than similar models in this class, with an extraordinary scanning range from 3 in./7.6 cm to 70 ft/21.4 m. With one scanner you 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

Zebra ultra-rugged scanners earned their name for a reason—you won't find a tougher family of scanners. Ready for the world's harshest environments, the DS3600-ER has the highest drop, tumble and sealing specifications in its class. It can survive 10 ft./3 m drops to concrete and 7,500 tumbles. With dual IP65/IP68 sealing, the DS3600-ER is dust proof, can handle the force of jetting water and be fully submerged in water. Built to withstand extreme heat, cold and humidity, the DS3600-ER can be used anywhere— indoor, outdoor and even in the freezer.¹

Ultra-Rugged Cradle and Charging Contacts Designed to Last
The DS3600-ER is the first scanner in its class to offer a cradle with
IP65 sealing. Its industrial charging contacts withstand 250,000
insertions. And Zebra's exclusive Connect+ Contact technology
assures reliable, corrosion-free charging over the life of the scanner.

Easily Capture Label Data for Better Inventory Management With Label Parse+, the DS3600-ER can instantly capture and parse GS1 label barcode data on items, enabling workers to easily capture a wealth of data, including expiration dates and lot number/

manufacturing location.

Read Up To 20 Barcodes with One Press of the Scan Trigger

With Multi-Code Data Formatting (MDF), the DS3600-ER can capture multiple barcodes with a single scan and transmit only the barcodes you need, in the order your application expects.

Faster Pick-List Processing

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

Flexible Feedback Modes

Mix and match the feedback modes that best fit your environment—vibration, wraparound LEDs that are easy to see from any position, a beep tone and Zebra's Direct Decode Indicator that projects illumination on the captured barcode.

Support for the Barcode of the Future—Digimarc®

DS3600-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.

Superior Cordless Technology

More Than 70,000 Scans on a Single Charge

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, 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.

Battery and Bluetooth® Status At-A-Glance

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

Switch Workflows in an Instant with AutoConfig

Since scanner settings are stored in the cradle base, simply pair the DS3600-ER to a different base to automatically configure it for a new host application. For example, you can take a scanner from the forklift and use it for shipping without manually changing settings.

Keep Track of Your Scanners and Prevent Workflow Interruptions

With Virtual Tether, you won't have to worry about a warehouse worker leaving a scanner behind on a pallet. Both the scanner and cradle will alert users when a scanner is taken beyond its Bluetooth range or left out of the cradle for a predefined length of time.

Eliminate Bluetooth Interference with Wi-Fi Friendly Mode

Zebra's exclusive Wi-Fi Friendly Mode eliminates the wireless interference that Bluetooth devices can create in your Wi-Fi environment.

Unrivaled Manageability

Instantly Connect to Your Industrial Ethernet Network

Zebra's Network Connect for Automation delivers a seamless connection between DS3600-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.

Identify and Correct Problem Barcodes with ScanSpeed Analytics

Only from Zebra, ScanSpeed Analytics provides detailed metrics on every barcode captured—enabling you to identify poor performing barcodes that slow down your operations.

No-Cost Tools to Meet Your Management Needs

With 123Scan, you can easily create configuration barcodes to program scanners. If your imagers are in multiple locations across the country or around the world, with Scanner Management Service (SMS), you can configure and update the firmware for any DS3600-ER device that is plugged into the host—no depot staging or user action is required.

Up-To-The-Minute Insight Into Every Aspect of Your Scanners

The logging agent's Remote Diagnostics capabilities automate the recording of scanner asset information, health and statistics, configuration settings and barcode data—giving you the information needed for event verification, blockchain traceability, pilot site ROI generation, troubleshooting and predictive fleet-wide trend analysis.

Physical Characteri	stics
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 Chara	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/Pitch/Roll	Skew: ± 60° Pitch: ± 60° Roll: ± 360°
Decode Capabilities	52
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
Digimarc	Digital watermark technology
IUID Support	Supports IUID parsing, the ability to read and separate IUID fields per application requirements
User Environment	
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% non-condensing
Drop Specification	DS36X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature DS3678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C DS3608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -30° C to 50° C
Tumble Specification	7500 3.3 ft./1.0 m tumbles
Sealing	Scanner: IP65 and IP68 per applicable IEC sealing specifications 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 queries its asset information. For more information, visit www.zebra.com/sms
Network Connect	Seamlessly connects 3600 Series scanners directly to your Industrial Ethernet network without any third-party conversion equipment. For more information, visit www.zebra.com/NetworkConnect
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 (Typ	oical) ³
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

The Zebra 3600 **Ultra-Rugged Scanner Series**

- LI3600-SR: Standard range 1D barcode capture
- LI3600-ER: Extended range 1D barcode capture
- DS3600-SR: Standard range scanning of 1D and 2D barcodes
- DS3600-HP: High-performance scanner captures 1D/2D barcodes over longer distances, plus OCR, photos and documents
- DS3600-HD: Captures high-density 1D/2D barcodes
- DS3600-DP: Capture of Direct Part Marks (DPM)
- DS3600-ER: Extended range 1D/2D barcode capture
- DS3600-DPA: Optimized to read Direct Part Marks (DPM) and wide 1D barcodes
- DS3600-KD: Versatility of a keypad and color display

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
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

Footnotes

- ${\bf 1.} \ \ {\bf Heated} \ {\bf scanner} \ {\bf holder} \ {\bf accessory} \ {\bf recommended} \ {\bf to} \ {\bf reduce} \ {\bf condensation} \ {\bf on}$ the outside of scan window when moving in and out of freezers.
- 2. Refer to Product Reference Guide for complete list of symbologies. Specifications are subject to change without notice.
- 3. Printing resolution, contrast, and ambient light dependent.

Datacapture DNA



























































PRODUCT SPEC SHEET



DS3600-HP Ultra-Rugged Scanner

Unstoppable performance with advanced capture of 1D/2D barcodes plus OCR, photos and documents

The productivity of your warehouse and manufacturing workers depends on the quality of their scanners. The DS3600-HP Ultra-Rugged scanner enables high-performance capture of 1D and 2D barcodes to nearly 7 ft./2.1 m away. Built for your toughest environments, the DS3600-HP is virtually indestructible, including an enhanced 10 ft./3 m drop spec to concrete and dual IP65/IP68 sealing. With DataCapture DNA, Zebra's exclusive software ecosystem, you can take scanner performance far beyond the basics simplifying every stage of the scanning experience over the life of your device. And when it comes to cordless technology, the DS3678-HP's Zebra-only features put it in a class of its own. The DS3600-HP—the unstoppable performance you need to maximize workforce productivity and throughput in your operations.



Performs in Your Toughest Environments

Scan it All—at Astonishing Speeds

Workers can capture virtually any 1D or 2D barcode as fast as they can pull the trigger, whether they're in hand or as far as 7 ft./2.1 m away—offering up to 30% more working range than similar models in this class. Powered by Zebra's exclusive PRZM Intelligent Imaging technology and the highest sensor resolution in its class, the DS3600-HP instantly captures the most problematic barcodes including barcodes that are dirty, damaged, poorly printed and under shrinkwrap.

Ultra-Rugged—the Most Indestructible Design in its Class

Zebra ultra-rugged scanners earned their name for a reasonyou won't find a tougher family of scanners. Ready for the world's harshest environments, the DS3600-HP has the highest drop, tumble and sealing specifications in its class. It can survive 10 ft./3 m drops to concrete and 7,500 tumbles. With dual IP65/IP68 sealing, the DS3600-HP is dust proof, can handle the force of jetting water and be fully submerged in water. Built to withstand extreme heat, cold and humidity, the DS3600-HP can be used anywhere—indoor, outdoor and even in the freezer.1

Ultra-Rugged Cradle and Charging Contacts Designed to Last The DS3600-HP is the first scanner in its class to offer a cradle with IP65 sealing. Its industrial charging contacts withstand 250,000 insertions. And Zebra's exclusive Connect+ Contact technology assures reliable, corrosion-free charging over the life of the scanner.

Capture OCR, Photos and Documents

The DS3600-HP makes it easy to take high quality photos for documentation. With Zebra's Intelligent Document Capture, you can automatically de-skew and brighten document images. And support for multiple OCR fonts enables fast, easy data transfer.

Easily Capture Label Data for Better Inventory Management With Label Parse+, the DS3600-HP can instantly capture and parse GS1 label barcode data on items, enabling workers to easily capture a wealth of data, including expiration dates and lot number/ manufacturing location.

Read Up To 20 Barcodes With One Press of the Scan Trigger

With Multi-Code Data Formatting (MDF), the DS3600-HP can capture multiple barcodes with a single scan and transmit only the barcodes you need, in the order your application expects.

Faster Pick-List Processing

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

Flexible Feedback Modes

Mix and match the feedback modes that best fit your environment vibration, wraparound LEDs that are easy to see from any position, a beep tone and Zebra's Direct Decode Indicator that projects illumination on the captured barcode.

Superior Cordless Technology

More Than 100,000 Scans on a Single Charge

The PowerPrecision+ battery delivers the ultimate in battery power and management. You get more than twice the amount of scans per charge than with competitive models 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.

Battery and Bluetooth Status At-A-Glance

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

Switch Workflows in an Instant with AutoConfig

Since scanner settings are stored in the cradle base, simply pair the DS3600-HP to a different base to automatically configure it for a new host application. For example, you can take a scanner from the forklift and use it for shipping without manually changing settings.

Keep Track of Your Scanners and Prevent Workflow Interruptions

With Virtual Tether, you won't have to worry about a warehouse worker leaving a scanner behind on a pallet. Both the scanner and cradle will alert users when a scanner is taken beyond its Bluetooth range or left out of the cradle for a predefined length of time.

Eliminate Bluetooth Interference with Wi-Fi Friendly Mode

Zebra's exclusive Wi-Fi Friendly Mode eliminates the wireless interference that Bluetooth devices can create in your Wi-Fi environment.

Unrivaled Manageability

Instantly Connect to Your Industrial Ethernet Network

Zebra's Network Connect for Automation delivers a seamless connection between DS3600-HP 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.

Identify and Correct Problem Barcodes with ScanSpeed Analytics

Only from Zebra, ScanSpeed Analytics provides detailed metrics on every barcode captured—enabling you to identify poor performing barcodes that slow down your operations.

No-Cost Tools to Meet Your Management Needs

With 123Scan, you can easily create configuration barcodes to program scanners. If your imagers are in multiple locations across the country or around the world, with Scanner Management Service (SMS), you can configure and update the firmware for any DS3600-HP device that is plugged into the host—no depot staging or user action is required.

Up-To-The-Minute Insight Into Every Aspect of Your Scanners

The logging agent's Remote Diagnostics capabilities automate the recording of scanner asset information, health and statistics, configuration settings and barcode data—giving you the information needed for event verification, blockchain traceability, pilot site ROI generation, troubleshooting and predictive fleet-wide trend analysis.

Physical Characteri	stics
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): 360 mA (RMS typical)
Standby Current	DS3608-HP (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 Chara	cteristics
Scans per Full Charge	100,000+
Illumination	Two (2) warm white light LEDs
Aimer	655 nm laser
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 Capabilities	5 ²
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
IUID Support	Supports IUID parsing, the ability to read and Separate IUID fields per application requirements
User Environment	
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% non-condensing
Drop Specification	DS36X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature DS3678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C DS3608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -30° C to 50° C

Tumble Specification	7500 3.3 ft./1.0 m tumbles
Sealing	Scanner: IP65 and IP68 per applicable IEC sealing specifications FLB cradle: IP65
ESD	Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge
Explosion Protection	Explosion-protected version available from BARTEC. For more information, visit www.Bartec.de/en
Ambient Light Immunity	0 to 10,037 Foot Candles/0 to 108,000 Lux (direct sunlight)
Utilities and Mainte	nance
123Scan	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 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/NetworkConne
Wireless Connectivi	ity
Bluetooth Radio	Bluetooth Class 1, Version 4.0 (LE), serial port (SPF 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 (Ty	oical) ³
Symbology/Resolution	Near/Far
Code 128: 5 mil	6.0-14.0 in./15.2-35.6 cm
Code 128: 20 mil	5.0-45.0 in./12.7-114.3 cm
Code 128: 40 mil	2.8-80 in./7.1-203.2 cm
Datamatrix: 7.5 mil	7.0-11.0 in./17.8-27.9 cm
Datamatrix: 10.0 mil	6.0-15.0 in./15.2-38.1 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; Internations 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**

- LI3600-SR: Standard range 1D barcode capture
- LI3600-ER: Extended range 1D barcode capture
- DS3600-SR: Standard range scanning of 1D and 2D barcodes
- DS3600-HP: High-performance scanner captures 1D/2D barcodes over longer distances, plus OCR, photos and documents
- DS3600-HD: Captures high-density 1D/2D barcodes
- DS3600-DP: Capture of Direct Part Marks (DPM)
- DS3600-ER: Extended range 1D/2D barcode capture
- DS3600-DPA: Optimized to read Direct Part Marks (DPM) and wide 1D barcodes
- DS3600-KD: Versatility of a keypad and color display

Regulatory (continued)	
Laser/LED Safety	International LED Safety: IEC 62471: 2006 (Ed.1.0); EN 62471: 2008 (LED); UL, VDE and CU recognized laser component
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-HP/ DS3678-HP 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

Footnotes

- 1. Heated scanner holder accessory recommended to reduce condensation on the outside of scan window when moving in and out of freezers.
- 2. Refer to Product Reference Guide for complete list of symbologies. Specifications are subject to change without notice.
- ${\it 3. Printing resolution, contrast, and ambient light dependent.}\\$

Datacapture DNA























































DS3600-HD Ultra-Rugged Scanner

Unstoppable performance for high-density 1D/2D barcodes

The productivity of workers on the manufacturing plant floor depends on the quality of the scanner you put in their hands. When your workers need to capture the small and dense 1D and 2D barcodes common in electronics and medical equipment manufacturing, with the DS3600-HD Ultra Rugged scanners, you can give them the best. Instantly capture any high-density 1D or 2D barcode printed directly on product components or labels in virtually any condition—or displayed on a screen. Built for your toughest environments, the DS3600-HD is virtually indestructible, including an enhanced 10 ft./3 m drop spec to concrete and dual IP65/IP68 sealing. With DataCapture DNA, Zebra's exclusive software ecosystem, you can simplify every stage of the scanning experience over the life of your device. The DS3600-HD—the unstoppable performance you need to maximize workforce productivity and throughput, reduce production cycle times and prevent unplanned production line downtime.



Performs In Your Toughest Environments

Superior Scanning on any High Density 1D/2D Barcode

Zebra's exclusive PRZM Intelligent Imaging technology 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. The DS3600-HD also captures standard printed barcodes in virtually any condition—damaged, dirty, poorly printed or under shrinkwrap. This dual functionality allows you to use the same scanner 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

Zebra ultra-rugged scanners earned their name for a reason—you won't find a tougher family of scanners. Ready for the world's harshest environments, the DS3600-HD has the highest drop, tumble and sealing specifications in its class. It can survive 10 ft./3 m drops to concrete and 7,500 tumbles. With dual IP65/IP68 sealing, the DS3600-HD is dust proof, can handle the force of jetting water and be fully submerged in water. Built to withstand extreme heat, cold and humidity, the DS3600-HD can be used anywhere—indoor, outdoor and even in the freezer.¹

Ultra-Rugged Cradle and Charging Contacts Designed to Last

The DS3600-HD is the first scanner in its class to offer a cradle with IP65 sealing. Its industrial charging contacts withstand 250,000 insertions. And Zebra's exclusive Connect+ Contact technology assures reliable, corrosion-free charging over the life of the scanner.

Easily Capture Label Data for Better Inventory Management

With Label Parse+, the DS3600-HD can instantly capture and parse GS1 label barcode data on items, enabling workers to easily capture a wealth of data, including expiration dates and lot number/manufacturing location.

Read Up To 20 Barcodes with One Press of the Scan Trigger With Multi-Code Data Formatting (MDF), the DS3600-HD can capture multiple barcodes with a single scan and transmit only the barcodes you need, in the order your application expects.

Faster Pick-List Processing

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

Flexible Feedback Modes

Mix and match the feedback modes that best fit your environment vibration, wraparound LEDs that are easy to see from any position, a beep tone and Zebra's Direct Decode Indicator that projects illumination on the captured barcode.

Superior Cordless Technology

More Than 100,000 Scans on a Single Charge

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, 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.

Battery and Bluetooth® Status At-A-Glance

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

Switch Workflows in an Instant with AutoConfig

Since scanner settings are stored in the cradle base, simply pair the DS3600-HD to a different base to automatically configure it for a new host application. For example, you can take a scanner from the manufacturing line and use it for shipping without manually changing settings.

Keep Track of Your Scanners and Prevent Workflow Interruptions With Virtual Tether, you won't have to worry about a warehouse worker leaving a scanner behind on a pallet. Both the scanner and cradle will alert users when a scanner is taken beyond its Bluetooth

range or left out of the cradle for a predefined length of time.

Eliminate Bluetooth Interference with Wi-Fi Friendly Mode

Zebra's exclusive Wi-Fi Friendly Mode eliminates the wireless interference that Bluetooth devices can create in your Wi-Fi environment.

Unrivaled Manageability

Instantly Connect to Your Industrial Ethernet Network

Zebra's Network Connect for Automation delivers a seamless connection between DS3600-HD 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.

Identify and Correct Problem Barcodes with ScanSpeed Analytics Only from Zebra, ScanSpeed Analytics provides detailed metrics on

every barcode captured—enabling you to identify poor performing barcodes that slow down your operations.

No-Cost Tools to Meet Your Management Needs

With 123Scan, you can easily create configuration barcodes to program scanners. If your imagers are in multiple locations across the country or around the world, with Scanner Management Service (SMS), you can configure and update the firmware for any DS3600-HD device that is plugged into the host—no depot staging or user action is required.

Up-To-The-Minute Insight Into Every Aspect of Your Scanners

The logging agent's Remote Diagnostics capabilities automate the recording of scanner asset information, health and statistics, configuration settings and barcode data—giving you the information needed for event verification, blockchain traceability, pilot site ROI generation, troubleshooting and predictive fleet-wide trend analysis.

Dimensions	Corded: 7.3 in. H x 3.0 in. W x 5.2 in. D
Dillielisions	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): 360 mA (RMS typical)
Standby Current	DS3608-HD (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 Chara	cteristics
Scans per Full Charge	100,000+
Image Capture	Basic
Illumination	Two (2) warm white light LEDs
Aimer	655 nm laser
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 Capabilities	<u> </u>
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
IUID Support	Supports IUID parsing, the ability to read and separate IUID fields per application requirements
User Environment	
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% non-condensing
Tumble Specification	7500 3.3 ft./1.0 m tumbles
Drop Specification	DS36X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature DS3678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C DS3608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -30° C to 50° C

Sealing	Scanner: IP65 and IP68 per applicable IEC sealing specifications; 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 Mainte	nance
123Scan	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 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
Network Connect	Seamlessly connects 3600 Series scanners directly to your Industrial Ethernet network with no additional conversion equipment. For more information, visit www.zebra.com/NetworkConnect
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)
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
Laser/LED Safety	International LED Safety: IEC 62471: 2006 (Ed.1.0); EN 62471: 2008 (LED); UL, VDE and CU recognized laser component
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
Decode Ranges (Ty	oical) ³
Symbology/Resolution	Near/Far
Code 128: 3 mil	2.0-3.0 in./5.1-7.6 cm
Code 128: 20 mil	2.2-26.0 in./5.6-66.0 cm
Datamatrix: 10 mil	1.0-9.0 in./ 2.5-22.9 cm

The Zebra 3600 **Ultra-Rugged Scanner Series**

- LI3600-SR: Standard range 1D barcode capture
- LI3600-ER: Extended range 1D barcode capture
- DS3600-SR: Standard range scanning of 1D and 2D barcodes
- DS3600-HP: High-performance scanner captures 1D/2D barcodes over longer distances, plus OCR, photos and documents
- DS3600-HD: Captures high-density 1D/2D barcodes
- DS3600-DP: Capture of Direct Part Marks (DPM)
- DS3600-ER: Extended range 1D/2D barcode capture
- DS3600-DPA: Optimized to read Direct Part Marks (DPM) and wide 1D barcodes
- DS3600-KD: Versatility of a keypad and color display

PRODUCT SPEC SHEET

DS3600-HD HIGH DENSITY ULTRA RUGGED SCANNER

Warranty

Subject to the terms of Zebra's hardware warranty statement, the DS3608-HD/ ${\sf DS3678\text{-}HD}\ is\ warranted\ against\ defects\ in\ workmanship\ and\ materials\ for\ a$ 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

Footnotes

- 1. Heated scanner holder accessory recommended to reduce condensation on the outside of scan window when moving in and out of freezers.
- 2. Refer to Product Reference Guide for complete list of symbologies. Specifications are subject to change without notice.
- 3. Printing resolution, contrast, and ambient light dependent.

DataCapture DNA





























DS3600-DP Ultra-Rugged Scanner

Unstoppable performance for Direct Part Marks (DPM)

Every day, workers on the manufacturing plant floor scan thousands of direct part marks required to protect product quality and meet end-to-end product traceability regulations. Their productivity depends on the quality of the scanner you put in their hands. With the DS3600-DP Ultra-Rugged scanner, you can give them the best. Get instant capture of direct part marks, plus virtually any 1D or 2D printed barcode. Built for your toughest environments, the DS3600-DP is virtually indestructible, including an enhanced 10 ft./3 m drop spec to concrete and dual IP65/IP68 sealing. With DataCapture DNA, Zebra's exclusive software ecosystem, you can simplify every stage of the scanning experience over the life of your device. And when it comes to cordless technology, the DS3678-DP's Zebra-only features put it in a class of its own. The DS3600-DP—the unstoppable performance you need to ensure traceability, reduce production cycle times and prevent unplanned production-line downtime.



Performs In Your Toughest Environments

Superior Scanning on DPM and Standard 1D/2D Barcodes

Comprehensive patented features and Zebra's exclusive PRZM Intelligent Imaging technology 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. The same scanner can capture virtually any barcode printed on a label—including damaged, dirty, poorly printed or under

shrinkwrap. This dual functionality allows you to use the same scanner on the production line for end-to-end track and trace, and in the warehouse from receiving to shipping.

Ultra-Rugged—the Most Indestructible Design in its Class

Zebra ultra-rugged scanners earned their name for a reason—you won't find a tougher family of scanners. Ready for the world's harshest environments, the DS3600-DP has the highest drop, tumble and sealing specifications in its class. It can survive 10 ft./3 m drops to concrete and 7,500 tumbles. With dual IP65/IP68 sealing, the DS3600-DP is dust proof, can handle the force of jetting water and be fully submerged in water. Built to withstand extreme heat, cold and humidity, the DS3600-DP can be used anywhere—indoor, outdoor and even in the freezer.¹

Advanced Illumination System

Advanced illumination provides the multiple lighting effects required to capture marks on any type of surface—including reflective, irregular and curves as well as low and high contrast marks. The built-in diffuser provides the indirect light required to capture marks printed on very shiny and reflective surfaces. The proprietary design of the diffuser also directs additional lighting to the edges of barcodes marked on a curved surface, enhancing the image for easier decoding. Finally, a glancing direct light mode provides the bright light required to successfully read low contrast barcodes marked on any type of surface, including challenging polished materials.

Easily Capture Label Data for Better Inventory Management

With Label Parse+, the DS3600-DP can instantly capture and parse GS1 label barcode data on items, enabling workers to easily capture a wealth of data, including expiration dates and lot number/manufacturing location.

Read Up To 20 Barcodes With One Press of the Scan Trigger

With Multi-Code Data Formatting (MDF), the DS3600-DP can capture multiple barcodes with a single scan and transmit only the barcodes you need, in the order your application expects.

Faster Pick-List Processing

Easily select and capture an individual barcode from any pick list.

Flexible Feedback Modes

Mix and match the feedback modes that best fit your environment—vibration, wraparound LEDs that are easy to see from any position, a beep tone and Zebra's Direct Decode Indicator that projects illumination on the captured barcode.

Superior Cordless Technology

Ultra-Rugged Cradle and Charging Contacts Designed to Last

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

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Since scanner settings are stored in the cradle base, simply pair the DS3600-DP to a different base to automatically configure it for a new host application. For example, you can take a scanner from the manufacturing line and use it for shipping without manually changing settings.

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Eliminate Bluetooth Interference with Wi-Fi Friendly Mode

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

Unrivaled Manageability

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Dimensions	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
Weight	Corded: 10.72 oz./304 g Cordless: 14.18 oz./402 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-DP (corded): 360 mA (RMS typical)
Standby Current	DS3608-DP (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-Ion rechargeable battery
User Indicators	Direct decode indicator; LEDs; beeper; vibration
Performance Charac	teristics
Scans per Full Charge	100,000+
Image Capture	Basic
Illumination	Direct: Two (2) warm white light LED ; Diffuse: Ring of red 634 nm LEDs
Aimer	655 nm laser
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 Capabilities	2
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
IUID Support	Supports IUID parsing, the ability to read and separate IUID fields per application requirements
User Environment	
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% non-condensing
Drop Specification	DS36X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature DS3678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C DS3608: Withstands multiple 8.0 ft/2.4 m drops to

Tumble Specification	7500 3.3 ft./1.0 m tumbles
•	
Sealing	Scanner: IP65 and IP68 per applicable IEC sealing specifications FLB cradle: IP65
ESD	Per EN61000-4-2, ±20 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 Mainter	nance
123Scan	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 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 with no additional conversion equipment. For more information, visit www.zebra.com/NetworkConnections
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)
Regulatory	
Environmental	RoHS EN 50581: 2012
Electrical Safety	EU Safety: EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + AC 2011 + A2: 2013; Internations 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
Laser/LED Safety	Exempt Risk Group LED per IEC/EN 62471 (Ed 1) Class 2 Laser per IEC/EN 60825-1 (Ed 3) Complies with 21CFR1040.10
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

The Zebra 3600 **Ultra-Rugged Scanner Series**

- LI3600-SR: Standard range 1D barcode capture
- LI3600-ER: Extended range 1D barcode capture
- DS3600-SR: Standard range scanning of 1D and 2D barcodes
- DS3600-HP: High-performance scanner captures 1D/2D barcodes over longer distances, plus OCR, photos and documents
- DS3600-HD: Captures high-density 1D/2D barcodes
- DS3600-DP: Capture of Direct Part Marks (DPM)
- DS3600-ER: Extended range 1D/2D barcode capture
- DS3600-DPA: Optimized to read Direct Part Marks (DPM) and wide 1D barcodes
- DS3600-KD: Versatility of a keypad and color display

Decode Range (Typical) ³	
Symbology/Resolution	Near/Far
Code 39: 3.0 mil	0.2-2.8 in./0.5-7.1 cm
Code 39: 5.0 mil	0.2-2.8 in./0.5-7.1 cm
PDF417: 6.6 mil	⁴ 0.2-3.2 in./ ⁴ 0.5-8.1 cm
Datamatrix: 5.0 mil	0.4-2.5 in./1.0-6.3 cm
Datamatrix: 10.0 mil	0.0-3.4 in./0.0-8.6 cm
QR: 5.0 mil	0.4-2.5 in./1.0-6.3 cm
QR: 10.0 mil	0.0-3.4 in./0.0-8.1 cm
100% UPC: 13.0 mil	⁴1.0-5.8 in./⁴2.5-14.7 cm

Warranty

Subject to the terms of Zebra's hardware warranty statement, the DS3608-DP/ ${\tt DS3678-DP}\ is\ warranted\ against\ defects\ in\ workmanship\ and\ materials\ for\ a$ 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

Footnotes

- 1. Heated scanner holder accessory recommended to reduce condensation on the outside of scan window when moving in and out of freezers.
- 2. Refer to Product Reference Guide for complete list of symbologies. Specifications are subject to change without notice.
- 3. Printing resolution, contrast, and ambient light dependent.
- 4. FOV/barcode width limited; Decode ranges measured with DPM Mode OFF, photographic paper barcodes, under 30fcd ambient light conditions.

DataCapture DNA























