DS3600-XR Ultra-Rugged Scanner

Unstoppable performance now with the industry's longest scanning range

When tasks get tougher, you need a scanner that's ready for the job. The DS3600-XR sets a new standard in extended range performance, enabling workers to scan faster, farther and more accurately than ever before. The DS3600-XR maintains the proven ruggedness of the DS3600-ER, increases scanning range by more than 40% and aimer visibility up to 7x — while decreasing device weight by 10%. The DS3600-XR delivers an edge over the competition for both rapidly proliferating 2D barcodes and traditional 1D. It seamlessly reads barcodes from as close as 2 in./5 cm to over 105 ft./32 m — nearer and farther than any scanner in its class. A high visibility green laser aimer makes scanning easier and more accurate at varying distances and lighting conditions. The DS3600-XR is virtually indestructible with a best-in-class 10 ft./3 m drop spec to concrete. Superior cordless technology makes it easier for your workers to use and manage their cordless scanners. And Zebra DataCapture DNA takes scanner performance far beyond the basics.

Performs in Your Toughest Environments

Scan Nearer and Farther with Class-leading Range
Engineered to perform at the highest level, the DS3600-XR can capture barcodes from less than 2 in./5 cm to over 105 ft./32 m — over 25% farther than other products in this class. It scans commonly used 2D barcodes nearly 40% farther, keeping productivity high as information-rich 2D codes become more prevalent in supply chains. Zebra's PRZM Intelligent Imaging technology offers unmatched scanning performance on virtually any 1D, 2D, paper and mobile barcode — including barcodes that are scratched, dirty, poorly printed, high density, even under shrinkwrap or frost.

Instant, Intelligent Barcode Capture Near and Far
Zebra's exclusive IntelliFocus™ technology delivers optimal performance across the entire scanning range and in a variety of lighting conditions. That means workers can use the same scanner to read barcodes on a picklist in hand, scan items on the uppermost shelves of warehouse racks or barcodes on the highest shipping container, capture ground level barcodes without bending down and reach more labels without getting out of the forklift.

High Visibility Green Laser Aimer for Indoor and Outdoor Scanning
The DS3600-XR's green laser aimer with a wide cross hair pattern is up to 7x more visible than a red aiming dot and can be seen across the entire decode range indoors and up to 10 ft./3 m in direct sunlight. The result is easier and more accurate aiming, whether workers are scanning in the dimmest corners of the warehouse or out on the loading dock, port or yard.

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-XR 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-XR is dust proof, can handle the force of jetting water and be fully submerged in water. And built to withstand extreme heat, cold and humidity, it can be used anywhere — indoor, outdoor and even in the freezer.[1]

Reach new heights in your harshest environments with the ultra-rugged scanner that redefines scanning range and versatility.
For more information, please visit www.zebra.com/ds36x8-xr

Ultra-Rugged Cradle and Charging Contacts Designed to Last

The 3600 Series are the first scanners in their class to offer a cradle with IP65 sealing. 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-XR 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-XR 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 80,000 Scans on a Single Charge

Workers can count on non-stop, full-shift power. The cordless DS3678-XR supports more than 80,000 scans in a single charge — that's at least 23 hours of continuous scanning and 60% more scans per charge than competitive models in this product class. The smart PowerPrecision+ battery provides comprehensive health information, so you can easily spot and replace aging batteries.

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

Simply pair the DS3600-XR to a different base to automatically configure it for a new host application. For example, 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, your cordless scanners are always where they should be, fully charged and ready for work. The scanner and cradle 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-XR scanners and a manufacturer's Industrial Ethernet network without the need for third party conversion equipment. The solution eliminates vulnerability points, improves security and reduces complexity.

No-Cost Tools to Meet Your Management Needs

With 123Scan, you can easily create configuration barcodes to program scanners. Zebra Remote Management makes it easy to manage scanners remotely, whether your imagers are in multiple locations across the country or around the world. You can configure and update the firmware for any DS3600 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

Remote Diagnostics automate the recording of scanner asset information, health and statistics, parameter 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.

Make Data-driven Decisions Informed by Your Scanners

Do more with your DS3600-XR with Zebra's IoT Connector, a fully automated real-time data collection tool that routes data from your scanners into your preferred IoT endpoint. The result? You can mine the data and get the insights needed to make decisions in real time.

Maximize Performance and Uptime with Unmatched Protection

Optional maintenance plans keep your DS3600 devices up and running in peak condition with coverage for accidental damage and everyday wear-and-tear. Choose a plan that's tailored to your needs and business urgency. You can enhance any Zebra OneCare plan with battery protection that takes the worry out of battery management and eliminates unplanned battery replacement costs.

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: 10.86 oz./308 g Cordless: 14.46 oz./410 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	Corded: Near: 360mA (RMS typical) Far: 450mA (RMS typical)
Standby Current	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
FIPS Security Certification and TAA Compliance	Certified Compliant with FIPS 140-3; Trade Agreement Act Compliant (specific configuration required)
User Indicators	Direct decode indicator; LEDs; beeper; vibration

Performance Characteristics

Scans per Full Charge (Cordless)	80,000
Image Capture	Basic
Aimer	520 nm laser
Illumination	Two warm-white LEDs 2700K
Imager Field of View	Near: 42.1° (H) x 27° (V); Far: 14° (H) x 7.9° (V)
Image Sensor	Far: 1920 horizontal x 1080 vertical pixels Near: 1280 horizontal x 800 vertical pixels
Minimum Print Contrast	25% 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	Supports IUID parsing, the ability to read and separate IUID fields per application requirements

Decode Ranges (Typical)[3]

Symbology/Resolution	Near/Far
100% UPCA: 13 mil	1.3 in. to 12.1 ft./3.3 cm to 3.7 m
Code 128: 10 mil	2.2 in. to 8.5 ft./5.6 cm to 2.6 m
Code 128: 15 mil	2.1 in. to 13.6 ft./5.3 cm to 4.1 m
Code 128: 40 mil	*[4] to 34.6 ft./*[4] to 10.5 m
Code 128: 100 mil	*[4] to 87.6 ft./*[4] to 26.7 m
Code 39: 5 mil	1.3 in. to 4.7 ft./3.3 cm to 1.4 m
Code 39: 7.5 mil	1.3 in. to 7.4 ft./3.3 cm to 2.2 m
Code 39: 20 mil	2.0 in. to 18.1 ft./5.1 cm to 5.5 m
Code 39: 40 mil	*[4] to 41.1 ft./*[4] to 12.5 m
Code 39: 55 mil Reflective	*[4] to 61.1 ft./*[4] to 18.6 m
Code 39: 100 mil	*[4] to 105.1 ft./*[4] to 32.0 m
Data Matrix: 10 mil	1.3 in. to 5.5 ft./3.3 cm to 1.7 m
Data Matrix: 100 mil	*[4] to 52.1 ft./*[4] to 15.9 m
Data Matrix: 200 mil	*[4] to 100.0 ft./*[4] to 30.5 m
QR Code: 10 mil	1.3 in. to 4.6 ft./3.3 cm to 1.4 m

Utilities and Maintenance

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 without any third-party conversion equipment. For more information, visit www.zebra.com/NetworkConnect

Regulatory

Environmental	RoHS EN 50581: 2012
Electrical Safety	EN 62368-1:2014/AC:2015 EN 62368-1:2014/A11:2017 IC 62368-1 (Ed.2) UL 60950-1, second edition, CAN/CSA-C22.2 N
Laser/LED Safety	21CFR1040.10 (Laser) IC 60825-1:2014 (Ed.3.0): EN 60825-1:2014 (Laser) EN 60825-1:2014/A11:2021

Markets and Applications

Warehouse

- Inventory Management
- Picking
- Packing
- Receiving
- Put Away
- Shipping
- Returns Processing
- Cross Dock

Manufacturing and Distribution

- Supply-line replenishment
- Quality Control
- Track and Trace
- Work in Process
- Parts tracking

Environments

- Warehouses
- Ports
- Rail yards
- Lumber yards
- And more

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 Cordless: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C Corded: 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)

Wireless Connectivity

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

	IC 62471:2006 (Ed.1.0): EN 62471:2008 (LED)
EMI/RF	EN 55032:2015/A11:2020 (Class B) EN 55035:2017/A11:2020 EN 61000-6-2:2005/AC:2005 EN 61000-3-2:2014 (Class A) EN 61000-3-2:2019 (Class A) EN 61000-3-3:2013 EN 61000-3-3:2013/A1:2019 EN 60601-1-2:2015. IC 60601-1-2:2014 47 CFR Part 15, Subpart B, Class B ICES-003 Issue 7, Class B

Warranty

Subject to the terms of Zebra's hardware warranty statement, the DS3608-XR/DS3678-XR are 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: www.zebra.com/warranty

Recommended Services

Zebra OneCare Select; Zebra OneCare Essential; Zebra Battery Maintenance Services

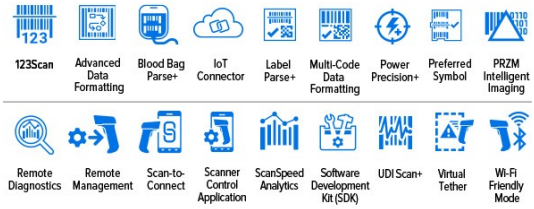
Footnotes

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.
3. Printing resolution, contrast, and ambient light dependent.
4. Dependent on the width of the barcode (shorter barcodes can be read even closer, and wider barcodes farther)

Specifications are subject to change without notice.

DataCapture DNA

DataCapture DNA is a suite of highly intelligent firmware, software, utilities and apps exclusively engineered to add functionality and simplify the deployment and management of Zebra scanners. For more information about DataCapture DNA and its applications, please visit www.zebra.com/datacapturedna



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