

# DS3600-KD Ultra-Rugged Scanner

Unstoppable performance with the versatility of a keypad and color display

Warehouses, retailers and manufacturers face unrelenting pressure to deliver more — and to do it faster and more accurately. Rise to meet the challenge with the DS3600-KD Ultra-Rugged Scanner with Keypad and Color Display. Built for your toughest environments, the DS3600-KD is virtually indestructible, including an enhanced 10 ft./3 m drop spec to concrete. The scanner reads barcodes in any condition, whether they're in hand or as far as 7 ft./2.1 m away. Workers can key in data, such as adding quantity and location, with the ergonomic keypad and color display. Pre-built applications offer the same 'point and shoot' simplicity of a scanner and enable workers to complete picking, putaway and inventory tasks with amazing efficiency and accuracy. And DataCapture DNA, Zebra's exclusive software ecosystem, takes scanner performance far beyond the basics — simplifying every stage of the scanning experience over the life of your device.



## Performs in your toughest environments

### 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. The DS3600-KD 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-KD 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-KD can be used anywhere — indoor, outdoor and even in the freezer.<sup>1</sup>

### Scan it all — at astonishing speeds

Workers can capture virtually any 1D or 2D barcode as fast as they can pull the trigger, from as far as 7 ft./2.1 m away. Powered by Zebra's exclusive PRZM Intelligent Imaging technology and the highest sensor resolution in its class, the DS3600-KD instantly captures the most problematic barcodes — including barcodes that are dirty, damaged, poorly printed and under shrinkwrap.

## Tackle more tasks with groundbreaking versatility

### The first ultra-rugged scanner with a color display and keypad

Make picking, inventory and point of sale tasks more efficient with the keypad and color display. The ergonomic backlit keypad is well designed for one-handed operation. The color display provides a more intuitive, modern experience and the display brightness automatically adjusts for easy viewing in any lighting condition.

### Pre-built applications ready to use right out of the box

The DS3600-KD takes the complexity out of app development and integration. Start using our pre-built applications on day one — including the ability to add quantity and/or location data to any scanned barcode, confirm that the contents inside a container match the outer label, and even add location data during inventory counts while roaming away from the host. There's virtually no learning curve for workers — if they can use a scanner, they can use the pre-built applications. And the ability for future customization can meet specific application needs.<sup>2</sup>

**The indestructible DS3600-KD with Keypad and Color Display — the simplicity of a scanner, the versatility to do more.**

For more information, visit [www.zebra.com/ds3600-kd](http://www.zebra.com/ds3600-kd)

### **Capture OCR, photos and documents**

The DS3600-KD makes it easy to take high quality photos for documentation. With Image Viewer, workers can quickly check an image before sending it to the host. Zebra's Intelligent Document Capture automatically de-skews and brightens 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-KD 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-KD 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**

Workers 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.

### **Switch workflows in an instant with AutoConfig**

Since scanner settings are stored in the cradle base, simply pair the DS3600-KD 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.

## **Superior cordless technology**

### **More than 60,000 scans on a single charge**

The DS3600-KD supports more than 60,000 scans on a single charge — that's over 16 hours of non-stop scanning. 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 color display always shows the battery gauge and Bluetooth status, making it easy to monitor battery power and connectivity throughout a shift.

### **Ultra-rugged cradle and charging contacts designed to last**

The DS3600-KD is the only 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.

### **Keep track of your scanners and prevent workflow interruptions**

With Virtual Tether, you won't have to worry about a customer accidentally taking a scanner from self-checkout or 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.

## **Unrivaed manageability**

### **Instantly connect to your Industrial Ethernet Network**

Zebra's Network Connect for Automation delivers a seamless connection between DS3600-KD scanners and a manufacturer's Industrial Ethernet network without the need for third party conversion equipment.

### **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-KD 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.

# Specifications

## Physical Characteristics

Dimensions	7.5 in. H x 3.1 in. W x 5.6 in. D 19 cm H x 7.8 cm W x 14.3 cm D
Weight	18 oz./510 g (includes battery pack)
Input Voltage Range	Host powered: 4.5 VDC min., 5.5 VDC max. External power supply: 11.4 VDC min., 12.6 VDC max.
Color	Industrial Green
Display	2.0 in. QVGA (320 x 240) color display; Corning Gorilla Glass
Backlight	LED backlit display
Keypad	Backlit 19-key alpha-numeric, with blue and green shift-key functions
Ambient Light Sensor	Automatically adjusts display and keypad backlight brightness
Supported Host Interfaces	USB, RS232, Keyboard Wedge Industrial Ethernet: EtherNet/IP, Profinet, Modbus TCP and Std TCP/IP
Battery	PowerPrecision+ 3100 mAh Li-Ion rechargeable battery
User Indicators	Direct decode indicator; LEDs; beeper; vibration

## Performance Characteristics

Scans per Full Charge	60,000+
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
Min. Print Contrast	15% minimum reflective difference
Skew/Pitch Roll Tolerance	+/- 60°; +/- 60°; 0-360°

## Decode Capabilities<sup>3</sup>

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

## 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

## Pre-built Applications

Scan and Enter Quantity	Scan an item, then key in the quantity
Scan and Enter Quantity/Location	Scan an item, then key in the quantity and location
Inventory Scan	Key in data after scans while roaming from the host
Match Scan	Verify that barcodes listed on the outside of a container match the barcodes on the items inside
Image Viewer	Preview a captured image before sending it to the host

## Utilities and Management

123Scan	Programs scanner parameters, upgrades firmware, displays scanned barcode data, scanning statistics, battery health, asset data and prints reports. <a href="http://www.zebra.com/123scan">www.zebra.com/123scan</a>
Scanner SDK	Generates a fully-featured scanner application, including documentation, drivers, test utilities and sample source code. <a href="http://www.zebra.com/scannersdkforwindows">www.zebra.com/scannersdkforwindows</a>
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and queries its asset information. <a href="http://www.zebra.com/sms">www.zebra.com/sms</a>
Network Connect	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>

## Markets and Applications

### Warehouse and Distribution

- Pick/Pack
- Work-in-Process (WIP)
- Cross-docking
- Inventory tracking
- Asset management
- Shipping and receiving
- Track and trace

### Manufacturing

- Parts replenishment
- Work-in-Process (WIP)
- Inventory tracking
- Pick/Pack
- Asset management
- Shipping and receiving
- Track and trace

### Retail

- Inventory tracking
- Point of sale

## User Environment

Operating Temperature	-4° F to 122° F/-20° C to 50° C
Storage Temperature	-40° F to 158° F/-40° C to 70° C
Humidity	5% to 95% RH, non-condensing
Drop Specification	Withstands multiple 10.0 ft./3.0 m drops to concrete at room temperatureWithstands multiple 8.0 ft./2.4 m drops to concrete at -4° F to 122° F/-20° C to 50° C
Tumble Specification	7500 3.3 ft./1.0 m tumbles
Environmental Sealing	Scanner: IP65 and IP68 per applicable IEC sealing specificationsFLB cradle: IP65
Electrostatic Discharge (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)

## Wireless Connectivity

Bluetooth RadioBluetooth Radio	Bluetooth Class 1, Version 4.0 (LE), serial port (SPP)
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 (Typical)<sup>4</sup>

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

## Warranty

Subject to the terms of Zebra's hardware warranty statement, the DS3600-KD 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. Customization will be available for select Zebra partners in Q3 2021. 3. Refer to Product Reference Guide for complete list of symbologies.4. Printing resolution, contrast and ambient light dependent.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](http://www.zebra.com/datacapturedna)

