

# LI3600-SR Ultra-Rugged Scanner

## Unstoppable performance for standard range 1D barcode capture

When warehouse or manufacturing plant floor workers need to capture 1D barcodes at standard ranges, you can give them the best with the LI3600-SR Ultra-Rugged scanner. Both corded and cordless models offer unmatched durability, superior scanning performance and unrivaled manageability, while delivering lightning-fast capture of any 1D barcode printed on a label in virtually any condition, or displayed on a screen. Built for your toughest environments, the LI3600-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 simplify every stage of the scanning experience over the life of your device. And when it comes to cordless technology, the LI3678-SR is loaded with Zebra-only features that put it in a class of its own. Get the unstoppable scanning performance you need to maximize workforce productivity and throughput in your operations with the LI3600-SR—only from Zebra.



### Performs In Your Toughest Environments

#### Superior Scanning Performance on Any 1D Barcode, in Any Condition

Read 1D barcodes displayed on a screen or printed on a label faster than any other 1D scanner on the market—even if they are under heavy shrinkwrap or damaged, dirty or poorly printed.

The advanced linear imager offers 30% more working range than competitive devices, and captures barcodes as fast as your workers can pull the trigger for extraordinary productivity—no need to pause between scans.

#### 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 LI3600-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 LI3600-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 LI3600-SR can be used anywhere—indoor, outdoor and even in the freezer.<sup>1</sup>

#### Ultra-Rugged Cradle and Charging Contacts Designed to Last

The LI3600-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.

#### Crispest Aiming Pattern in its Class

You get the industry's sharpest, brightest aiming pattern, ideal for first-time accurate capture of barcodes in pick lists.

**The LI3600-SR—Advanced 1D barcode capture in an ultra-rugged scanner**

For more information, visit [www.zebra.com/li36x8-sr](http://www.zebra.com/li36x8-sr)

## 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 140,000 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 LI3600-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

### 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 LI3600-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.

# 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: 10.1 oz./287 g Cordless: 13.6 oz./386.5 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	LI3608 (corded): 170 mA (RMS typical)
Standby Current	LI3608 (corded): 40 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 Characteristics

Scans per Full Charge	140,000+
Illumination	Two (2) 617nm Amber LEDs
Aimer	655 nm laser
Imager Field of View	35°
Image Sensor	1,500 pixels
Minimum Print Contrast	15% minimum reflective difference
Types Skew/Pitch/Roll	Skew: ± 65° Pitch: ± 65° Roll: ± 45°

## Decode Capabilities<sup>2</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)
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## 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	LI36X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature LI3678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C LI3608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -30° C to 50° C
Tumble	7500 3.3 ft./1.0 m tumbles

## 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)

## The Zebra 3600 Ultra-Rugged Scanner Series

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

- 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
LED Safety	International LED Safety: IEC 62471: 2006 (Ed.1.0); EN 62471: 2008 (LED)
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 (Typical)<sup>3</sup>

Symbology/Resolution	Near/Far
Code 39: 4 mil	4.0-10.0 in./10.2-25.4 cm
Code 39: 7.5 mil	1.5-19.0 in./3.8-48.3 cm
UPC: 13 mil (100%)	1.0-31.0 in./2.5-78.7 cm
Code 39: 20 mil	1.0-42.0 in./0-106.7 cm

## Warranty

Subject to the terms of Zebra's hardware warranty statement, the LI3608-SR/LI3678-SR is warranted against defects in workmanship and materials for a period of three (3) years from the date of shipment. For complete warranty statement, go to: [www.zebra.com/warranty](http://www.zebra.com/warranty)

## Recommended Services

Zebra OneCare™ Select; Zebra OneCare Essentials

## User Environment

Specification	
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 Maintenance

123Scan	Programs scanner parameters, upgrades firmware, provides scanned barcode data and prints reports. For more information, visit <a href="http://www.zebra.com/123Scan">www.zebra.com/123Scan</a>
Scanner SDK	Generates a fully-featured scanner application, including documentation, drivers, test utilities and sample source code. For more information, visit <a href="http://www.zebra.com/windowsSDK">www.zebra.com/windowsSDK</a>
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and queries its asset information. For more information, visit <a href="http://www.zebra.com/sms">www.zebra.com/sms</a>
Network Connect	Seamlessly connects 3600 Series scanners directly to your Industrial Ethernet network with no additional conversion equipment. For more information, visit <a href="http://www.zebra.com/NetworkConnect">www.zebra.com/NetworkConnect</a>

## 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

For more information about DataCapture DNA and its applications, please visit [www.zebra.com/datacapturedna](http://www.zebra.com/datacapturedna)

