### LI3600-SR STANDARD RANGE ULTRA-RUGGED SCANNER



# 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.

### 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**

Ris. 5 cm H x 7.6 cm W x 13.2 cm D	Physical Characteris	STICS
Cordless: 13.6 oz./386.5 g	Dimensions	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
External power supply: 11.4 VDC min., 12.6 VDC max.  Operating Current L13608 (corded): 170 mA (RMS typical)  Standby Current L13608 (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  Skew/Pitch/Roll Skew: ± 65°	Weight	9
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 Illumination Two (2) 617nm Amber LEDs Aimer 655 nm Iaser Imager Field of View Image Sensor 1,500 pixels Minimum Print Contrast 15% minimum reflective difference  Skew/Pitch/Roll Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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 LI3678: Withstands multiple 10.0 ft/3.0 m drops to concrete at -20° C to 50° C LI3608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C Condiess: -4° F to 168 per applicable IEC sealing specifications FLB cradie: IP65  ESD Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge Ambient Light 0 to 10,037 Foot Candles/0 to 108,000 Lux	Input Voltage Range	External power supply: 11.4 VDC min., 12.6 VDC
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  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  ID  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)  User Environment  Operating Temp.  Corded: -22° F to 122° F/-30° C to 50° C C Cordless: -4° F to 122° F/-20° C to 50° C C Cordless: -4° F to 122° F/-20° C to 50° C C L I36X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L I3678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C L L I3608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -30° C to 50° C  Tumble Specification  FLB cradle: IP65  ESD  Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV direct discharge  Ambient Light  O to 10,037 Foot Candles/0 to 108,000 Lux	Operating Current	LI3608 (corded): 170 mA (RMS typical)
Supported Host Interfaces	Standby Current	LI3608 (corded): 40 mA (RMS typical)
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  Ildunination  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  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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  S% 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 -30° C to 50° C LI3608: 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 ENG1000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge	Color	Industrial Green
User Indicators  Direct decode indicator; LEDs; beeper; vibration  Performance Characteristics  Scans per Full Charge  Illumination  Two (2) 617nm Amber LEDs  Aimer  655 nm laser  Imager Field of View  35°  Image Sensor  1,500 pixels  Minimum Print Contrast  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Pecode Capabilities²  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)  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  S% to 95% non-condensing  Drop Specification  Li36X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at -20° C to 50° C Li3608: 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 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 direct discharge, ±10 KV indirect discharge	• •	Industrial Ethernet: EtherNet/IP, Profinet, Modbus
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  Skew/Pitch/Roll Skew: ± 65°	Battery	ı -
Scans per Full Charge   140,000+   140,000	User Indicators	Direct decode indicator; LEDs; beeper; vibration
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     Skew/Pitch/Roll   Skew: ± 65°     Pitch: ± 65°     Roll: ± 45°     Decode Capabilities     1D	Performance Chara	cteristics
Imager Field of View   35°	Scans per Full Charge	140,000+
Image Field of View  Image Sensor  1,500 pixels  Minimum Print Contrast  15% minimum reflective difference  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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 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  Ambient Light  0 to 10,037 Foot Candles/0 to 108,000 Lux	Illumination	Two (2) 617nm Amber LEDs
Image Sensor   1,500 pixels	Aimer	655 nm laser
Minimum Print Contrast  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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  L136X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° 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  Ambient Light  0 to 10,037 Foot Candles/0 to 108,000 Lux	Imager Field of View	35°
Contrast    15% minimum reflective difference	Image Sensor	1,500 pixels
Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  1D		15% minimum reflective difference
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11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma)  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  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 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  Ambient Light  0 to 10,037 Foot Candles/0 to 108,000 Lux	Decode Capabilities	5 <sup>2</sup>
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  L136X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C  L13608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -30° C to 50° C  Tumble 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  Ambient Light  O to 10,037 Foot Candles/O to 108,000 Lux	1D	
Cordless: -4° F to 122° F/-20° C to 50° C  Storage Temp40° F to 158° F/-40° C to 70° C  Humidity 5% to 95% non-condensing  Drop Specification L136X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C  L13608: 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  Ambient Light 0 to 10,037 Foot Candles/0 to 108,000 Lux	User Environment	
Humidity  5% to 95% non-condensing  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 Specification  7500 3.3 ft./1.0 m tumbles  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  Ambient Light  0 to 10,037 Foot Candles/0 to 108,000 Lux	Operating Temp.	
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concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C L13608: 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  0 to 10,037 Foot Candles/0 to 108,000 Lux	Humidity	5% to 95% non-condensing
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  0 to 10,037 Foot Candles/0 to 108,000 Lux	Drop Specification	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
specifications FLB cradle: IP65  ESD Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge  Ambient Light 0 to 10,037 Foot Candles/0 to 108,000 Lux	Tumble Specification	7500 3.3 ft./1.0 m tumbles
direct discharge, ±10 KV indirect discharge  Ambient Light 0 to 10,037 Foot Candles/0 to 108,000 Lux	Sealing	specifications
	ESD	

123Scan	Programs scanner parameters, upgrades
1233can	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; 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 + At: 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	pical) <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	
LI3678-SR is warranted ag	bra's hardware warranty statement, the LI3608-SR/ gainst defects in workmanship and materials for a rom the date of shipment. For complete warranty ww.zebra.com/warranty

### 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

### **Recommended Services**

Zebra OneCare™ Select; Zebra OneCare Essentials

### **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































# LI3600-ER Ultra-Rugged Scanner

### Unstoppable performance for extended range 1D barcode scanning

Every day, workers in your warehouse scan thousands of 1D barcodes near and far to ensure order accuracy and on-time delivery. Their productivity depends on the quality of the scanner you put in their hands. With the LI3600-ER Ultra-Rugged scanner, you can give them the best. This linear imager enables extended range capture of virtually any 1D barcode displayed on a screen or printed on a label—nearer and farther than any scanner in this class, from 2 in./5.1 cm to 56 ft/17.1 m away. Built for your toughest environments, the LI3600-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 simplify every stage of the scanning experience over the life of your device. And when it comes to cordless technology, the LI3678-ER's Zebra-only features put it in a class of its own. The LI3600-ER—the unstoppable performance you need to maximize workforce productivity and throughput in your operations.



### **Performs In Your Toughest Environments**

### Best-In-Class Scanning Performance—and Scanning Range

This linear imager delivers an extraordinary scanning range as far as 56 ft./17.1 m, enabling your workers to scan 1D printed barcodes 26% farther than the prior generation laser model. Your workers only need one scanner to read barcodes a hands-length away (including extra-wide codes) and on the uppermost shelves of your warehouse racks. Capture virtually any barcode in any condition—including under shrinkwrap, damaged, dirty or poorly printed—as fast as workers can pull the trigger, for first-time, every-time scanning.

### 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-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 LI3600-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 LI3600-ER 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-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.

Intuitive Aiming Pattern for Ultra Simple Scanning at Any Distance A new aiming pattern provides foolproof aiming for codes in hand—and on the uppermost warehouse racks.

### 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, 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-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**

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-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.

# **Specifications**

Ris.5 cm H x 7.6 cm W x 13.2 cm D	Physical Characteris	Sucs
Cordless: 15.0 oz./424 g	Dimensions	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
External power supply: 11.4 VDC min., 12.6 VDC max.  Operating Current  Li3608-ER (corded): 250 mA (RMS typical)  Standby Current  Li3608-ER (corded): 110 mA (RMS typical)  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  100,000+  Illumination  660 nm LED  Aimer  655 nm laser  Imager Field of View  30.7° (H)  Image Sensor  2,496 pixels  Minimum Print  Contrast  25% minimum reflective difference  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  1D  Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, 12 of 5, Korean 3 of 5, GSI DataBar, Base 32 (Italian Pharma)  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  Sw 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  Li3608: 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 cradie: IP65  ESD  Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge  Ambient Light  O to 10,000 Foot Candles/0 to 107639 Lux	Weight	ı -
Standby Current   Li3608-ER (corded): 110 mA (RMS typical)	Input Voltage Range	External power supply: 11.4 VDC min., 12.6 VDC
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  100,000+  Illumination  660 nm LED  Aimer  655 nm laser  Imager Field of View  30.7° (H)  Image Sensor  2,496 pixels  Minimum Print Contrast  25% minimum reflective difference  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  ID  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)  User Environment  Operating Temp.  Corded: -22° F to 122° F/-30° C to 50° C C Cordless: -4° F to 122° F/-20° C to 50° C C Cordless: -4° F to 122° F/-20° C to 50° C C CI 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 -20° C to 50° C  Tumble Specification  FLB cradle: IP65  ESD  Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV direct discharge  Ambient Light  O to 10,000 Foot Candles/0 to 107639 Lux	Operating Current	LI3608-ER (corded): 250 mA (RMS typical)
Supported Host Interfaces	Standby Current	LI3608-ER (corded): 110 mA (RMS typical)
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  100,000+  Illumination  660 nm LED  Aimer  655 nm laser  Imager Field of View  30.7° (H)  Image Sensor  2,496 pixels  Minimum Print Contrast  25% minimum reflective difference  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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  S% 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 C LI3608: 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 ENG1000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV idirect discharge, ±10 KV idirect discharge, ±10 KV idirect discharge, ±10 KV idirect discharge	Color	Industrial Green
User Indicators  Direct decode indicator; LEDs; beeper; vibration  Performance Characteristics  Scans per Full Charge  Illumination  660 nm LED  Aimer  655 nm laser  Imager Field of View  30.7° (H)  Image Sensor  2,496 pixels  Minimum Print Contrast  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Pecode Capabilities²  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)  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  S% 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 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 direct discharge, ±10 KV indirect discharge	• •	Industrial Ethernet: EtherNet/IP, Profinet, Modbus
Performance Characteristics  Scans per Full Charge 100,000+  Illumination 660 nm LED  Aimer 655 nm laser  Imager Field of View 30.7° (H)  Image Sensor 2,496 pixels  Minimum Print Contrast 25% minimum reflective difference  Skew/Pitch/Roll Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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 Temp40° F to 158° F/-40° C to 70° C  Humidity 5% to 95% non-condensing  L136X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° 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	Battery	ı -
Illumination   660 nm LED     Aimer   655 nm laser     Imager Field of View   30.7° (H)     Image Sensor   2,496 pixels     Minimum Print Contrast   25% minimum reflective difference     Skew/Pitch/Roll   Skew: ± 65° Pitch: ± 65° Roll: ± 45°     Pecode Capabilities²     D	User Indicators	Direct decode indicator; LEDs; beeper; vibration
Illumination   660 nm LED	Performance Chara	cteristics
Imager Field of View   30.7° (H)	Scans per Full Charge	100,000+
Imager Field of View  Image Sensor  2,496 pixels  Minimum Print Contrast  25% minimum reflective difference  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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 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  Ambient Light  0 to 10,000 Foot Candles/0 to 107639 Lux	Illumination	660 nm LED
Image Sensor   2,496 pixels	Aimer	655 nm laser
Minimum Print Contrast  25% minimum reflective difference  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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  L136X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C  L13608: 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  Ambient Light  0 to 10,000 Foot Candles/0 to 107639 Lux	Imager Field of View	30.7° (H)
Contrast  Skew/Pitch/Roll  Skew: ± 65° Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  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)  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  Timble Specification  Tool 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  Ambient Light  0 to 10,000 Foot Candles/0 to 107639 Lux	Image Sensor	2,496 pixels
Pitch: ± 65° Roll: ± 45°  Decode Capabilities²  1D		25% minimum reflective difference
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)  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 Temp40° 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 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 0 to 10,000 Foot Candles/0 to 107639 Lux	Skew/Pitch/Roll	Pitch: ± 65°
11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma)  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  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 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  Ambient Light  0 to 10,000 Foot Candles/0 to 107639 Lux	Decode Capabilities	5 <sup>2</sup>
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  L136X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C  L13608: Withstands multiple 8.0 ft/2.4 m drops to concrete at -30° C to 50° C  Tumble 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  Ambient Light  O to 10,000 Foot Candles/0 to 107639 Lux	1D	
Cordless: -4° F to 122° F/-20° C to 50° C  Storage Temp40° F to 158° F/-40° C to 70° C  Humidity 5% to 95% non-condensing  Drop Specification L136X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C  L13608: 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  Ambient Light 0 to 10,000 Foot Candles/0 to 107639 Lux	User Environment	
Humidity  5% to 95% non-condensing  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 Specification  7500 3.3 ft./1.0 m tumbles  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  Ambient Light  0 to 10,000 Foot Candles/0 to 107639 Lux	Operating Temp.	
Drop Specification  L136X8: Withstands multiple 10.0 ft/3.0 m drops to concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C L13608: 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  Ambient Light  0 to 10,000 Foot Candles/0 to 107639 Lux	Storage Temp.	-40° F to 158° F/-40° C to 70° C
concrete at room temperature L13678: Withstands multiple 8.0 ft/2.4 m drops to concrete at -20° C to 50° C L13608: 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  0 to 10,000 Foot Candles/0 to 107639 Lux	Humidity	5% to 95% non-condensing
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  0 to 10,000 Foot Candles/0 to 107639 Lux	Drop Specification	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
specifications FLB cradle: IP65  ESD Per EN61000-4-2, ±25 KV air discharge, ±10 KV direct discharge, ±10 KV indirect discharge  Ambient Light 0 to 10,000 Foot Candles/0 to 107639 Lux	Tumble Specification	7500 3.3 ft./1.0 m tumbles
direct discharge, ±10 KV indirect discharge  Ambient Light 0 to 10,000 Foot Candles/0 to 107639 Lux	Sealing	
	ESD	
		1

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 queri 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/NetworkConne
Wireless Connectivi	ty
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)
Regulatory	
Environmental	RoHS EN 50581: 2012
Electrical Safety	EU Safety: EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + AC 2011 + A2: 2013; Internation 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 Equipmen EN 60601-1-2: 2007/AC: 2010, IEC 60601-1-2: 200 (Modified); Radio Frequency Devices: 47 CFR Part 15, Subpart B, Class B Digital Apparatus: ICES-003 Issue 5, Class B
Decode Ranges (Typ	pical) <sup>3</sup>
Symbology/Resolution	Near/Far
Code 39: 7.5 mil	3 to 28 in./7.6 to 71.2 cm
Code 39: 10 mil	2 to 70 in./5.1 to 177.8 cm
Code 128: 15 mil	5 to 85 in./12.7 to 215.9 cm
Code 39: 20 mil	3 to 140 in./7.62 to 355.6 cm
Code 39: 55 mil	6 to 350 in./15.24 to 889.0 cm
Code 39: 100 mil	20 to 680 in./50.8 to 1727.2 cm
Code 39: 100 mil Reflective	30 to 780 in./76.2 to 1981.2 cm

### 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

### Warranty

Subject to the terms of Zebra's hardware warranty statement, the LI3608-ER/ LI3678-ER 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: http://www.zebra.com/warranty

#### **Recommended Services**

Zebra OneCare™ Select; Zebra OneCare Essentials

#### **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



























