

# LI3608-SR/LI3678-SR Ultra-Rugged Scanner

# UNSTOPPABLE PERFORMANCE FOR STANDARD RANGE 1D BARCODE CAPTURE

Every day, workers in your warehouse and on the manufacturing plant floor scan thousands of barcodes to ensure product quality and on-time order delivery. Their productivity depends on the quality of the scanner you put in their hands. When workers need to capture 1D barcodes at standard ranges, you can give them the best with the 1D corded LI3608-SR and cordless LI3678-SR scanner. Both 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. The ultra-rugged design is practically indestructible — ideal for punishing environments. The LI3608-SR/LI3678-SR couldn't be easier and less time-consuming to deploy and manage. 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, including a sealed rugged cradle, a smart battery and Zebra's Wi-Fi Friendly Mode that prevents interference with your Wi-Fi network. Get the unstoppable performance you need to maximize workforce productivity and throughput in your operations with the LI3608-SR/LI3678-SR — only from Zebra.



# 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 percent 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

The LI3608-SR/LI3678-SR is our most rugged scanner yet, with the highest drop, tumble and sealing specification

in its class. The LI3608-SR/LI3678-SR is built to survive an 8 ft./2.4 m drop to concrete — 23 percent more durable than any other scanner in this class. The LI3608-SR/LI3678-SR operates reliably after 5,000 tumbles, simulating the real-world tumbling that occurs with a drop. Both models are dustproof, sprayproof and waterproof to IP67 — they can be sprayed down with jetting water and even submersed in water.

# Easy management with our complimentary industry-best tools

Remotely configure scanners, upgrade firmware, format data properly for your back end and monitor PowerPrecision+battery statistics and more with 123Scan and Scanner Management Service (SMS).

### Crispest aiming pattern in its class

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

### **Extreme temperature rating**

Built to handle extreme cold, heat and humidity, you can use the LI3608-SR/LI3678-SR anywhere — even in the freezer\*.

## A Bluetooth model in a class of its own for superior cordless freedom

Bluetooth 4.0 (Low Energy) provides lightning fast wireless communication and maximum energy efficiency.

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

The 'go anywhere' rugged cradle offers superior versatility and durability. The LI3678-SR cradle is the only one in its class to offer IP65 sealing. And its industrial charging contacts withstand 250,000 insertions.

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

The PowerPrecision+ battery delivers the ultimate in battery power and management. You get nearly three times the amount of scans per charge than with competitive models — more than 140,000 scans per charge, 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

#### **SPECIFICATION SHEET**

**ZERRA 3600 ULTRA-RUGGED SERIES**: LI3608-SR/LI3678-SR CORDED AND CORDLESS 1D LINEAR IMAGER

if batteries are healthy and holding a full charge, no longer holding a full charge, or at end of life and require replacement.

#### Three flexible feedback modes

Mix and match the feedback modes that are ideal in your environment vibration, red and green LEDs located in an area where they are always easy to see, plus the traditional loud beep tone.

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

Zebra's Network Connect for Automation delivers a seamless connection between LI3608-SR/ LI3678-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.

#### DataCapture DNA

Zebra's DataCapture DNA is a technology platform of highly intelligent firmware, software, utilities and apps exclusively engineered for Zebra scanners. Leveraging more than 35 years of Zebra's industry expertise, DataCapture DNA delivers innovations that give our best-inbreed imagers greater intelligence and simplicity. When combined with the unstoppable performance found in every 3600 Series ultra-rugged scanner, DataCapture DNA turns Zebra's 3600 Series scanners into powerful tools that help to resolve tomorrow's data capture challenges today — and help your workers get more done each day.

### THE LI3608-SR/LI3678-SR — ADVANCED 1D BARCODE CAPTURE IN AN ULTRA-RUGGED SCANNER

FOR MORE INFORMATION, VISIT WWW.ZEBRA.COM/LI36X8-SR OR ACCESS OUR GLOBAL CONTACT DIRECTORY AT WWW.ZEBRA.COM/CONTACT

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

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

- · LI3608-SR/LI3678-SR: Standard range 1D barcode capture
- LI3608-ER/LI3678-ER: All-range 1D barcode capture
- DS3608-SR/DS3678-SR: Standard range scanning of 1D and 2D barcodes
- DS3608-HP/DS3678-HP: High performance scanner captures 1D/2D barcodes over longer distances, plus OCR, photos and documents
- DS3608-HD/DS3678-HD: Captures high-density 1D/2D barcodes
- DS3608-DP/DS3678-DP: Capture of Direct Part Marks (DPM)
- DS3608-ER/DS3678-ER: All-range 1D/2D barcode capture

# LI3608-SR/LI3678-SR Specifications Chart

| Dimensions                   | Corded: 7.3 in. H x 3.0 in. W x 5.2 in. D  |  |
|------------------------------|--|--|
| 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  |  |
|                              | 18.5 cm H x 7.6 cm W x 14.2 cm D   |  |
| Weight                       | Corded: 10.1 oz./287 g<br>Cordless: 13.6 oz./386.5 g   |  |
| Input Voltage Range          | Host powered: 4.5 VDC min., 5.5 VDC max.<br>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<br>Interfaces | USB, RS232, Keyboard Wedge<br>Industrial Ethernet: EtherNet/IP, Profinet, Modbus<br>TCP & Std TCP/IP   |  |
| Battery                      | PowerPrecision+ 3100 mAh Li-lon rechargeable battery   |  |
| User Indicators              | Direct decode indicator; LEDs; beeper; vibration   |  |
| PERFORMANCE CHAR             | ACTERISTICS  |  |
| Scans per Full Charge        | 140,000+   |  |
| Illumination                 | Two (2) 617nm Amber LEDs   |  |
| Imager Field of View         | 35°  |  |
| Image Sensor                 | 1,500 pixels   |  |
| Minimum Print Contrast       | 15% minimum reflective difference  |  |
| Skew/Pitch/Roll              | Skew: ± 65°<br>Pitch: ± 65°  |  |
|                              | Roll: ± 45°  |  |
| DECODE CAPABILITIES          | **   |  |
| 1D                           | Code 39, Code 128, Code 93, Codabar/NW7, Code<br>11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5,<br>GS1 DataBar, Base 32 (Italian Pharma) |  |
| USER ENVIRONMENT             |  |  |
| Operating Temp.              | Corded: -22° F to 122° F/-30° C to 50° C<br>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           | Withstands multiple 8.0 ft. / 2.4 m drops to concret   |  |
| Tumble Specification         | 5,000 tumbles @ 3.3 ft. (1 m)  |  |
| Sealing                      | Scanner: IP65 and IP67<br>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  |  |

| 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<br>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 CONNECTIVITY               |  |  |
| 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<br>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<br>International Safety: IEC 60950-1: 2005 + A1: 2009 + A2: 2013<br>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);<br>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 |  |

## LI3608-SR/LI3678-SR Specifications (continued)

| DATACAPTURE DNA      |                     |  |
|----------------------|---------------------|--|
| PRODUCTIVITY TOOLS   |                     |  |
| Wi-Fi™ Friendly Mode | Preferred Symbol    |  |
| MANAGEMENT TOOLS     |                     |  |
| 123Scan              | Remote Management   |  |
| PowerPrecision+      |                     |  |
| VISIBILITY TOOLS     |                     |  |
| Remote Diagnostics   | ScanSpeed Analytics |  |

#### **DEVELOPMENT TOOLS**



**Scanner Control Application** 



Software Development Kit

Scan-to-Connect

| DECODE RANGES        |                           |
|----------------------|---------------------------|
| 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 L13608-SR/L13678-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



<sup>\*</sup> Heated scanner holder accessory recommended to reduce condensation on the outside of scan window when moving in and out of freezers.

 $<sup>^{\</sup>ast\ast}$  Refer to Product Reference Guide for complete list of symbologies.