

# LS2208 Handheld Scanner

## Our best selling handheld laser scanner

With over eight million sold, the LS2208 remains our best selling handheld laser scanner. The LS2208 has it all — enterprise class scanning in a very ergonomic and durable lightweight design that delivers all day comfort, an extra-long read range for easy scanning, plus support for everyday 1D bar codes, including high-density. With multiple interfaces, a universal cable and support for keyboards in 97 languages, the LS2208 delivers plug-and-play simplicity in virtually every corner of the world. The LS2208 — the well-proven scanner powering the checkout lines all around the world.



### Durable construction

With its patented single board construction, patented frictionless liquid polymer scan element, scratch resistant tempered glass exit window and a stringent drop and tumble specification, the LS2208 delivers reliable all-day, every day operation.

### Capture high-density bar codes for greater application flexibility

With just one scanner, you can capture the high density bar codes common on small items.

### Deploy in every corner of the world

With support for 97 international keyboards, the LS2208 is ready for operation in your country, right out of the box.

### Class-leading working range

Workers can capture everyday 13 mil UPC bar codes on items that are over 25 in./63.5 cm away, improving productivity and the customer checkout experience.

### More decode feedback options

Choose from a variety of options to indicate the successful capture of a bar code: the Direct Decode Indicator (a blinking laser line), a beep tone, a red/green LED indicator — or any combination of the three.

### All day comfort your workers can count on

The well-proven ergonomic and lightweight balanced design provides maximum comfort, even in the most scan intensive environments. The result? Reduced user fatigue and increased worker productivity.

**Put our best selling laser scanner to work in your checkout lines.**

For more information, visit [www.zebra.com/ls2208](http://www.zebra.com/ls2208)

**Flexible handheld or hands-free operation**

The optional Intellistand™ enables presentation scanning and allows workers to automatically switch between hands-free and handheld modes in the time it takes to drop the LS2208 into the stand.

**Multiple interfaces**

No matter what host you need to connect to today or tomorrow, the future proof LS2208 is ready.

**Truly plug-and-play**

The universal cable connects to any computing environment, practically eliminating setup and training time.

**Advanced Data Formatting (ADF)**

Format data properly before it is sent to your host computer, eliminating the costly modification of host software.

# Specifications

## Physical Characteristics

|  |  |
|--|--|
| Dimensions                                       | 6.0 in. H x 2.5 in. W x 3.3 in. D 15.2 cm. H x 6.4 cm. W x 8.5 cm. D       |
| Weight   | 5.3 oz./150.0 g  |
| Input Voltage Range                              | 4.5 to 5.5 VDC host powered; 4.5 to 5.5 VDC external power supply          |
| Operating Current at Nominal Voltage (5.0V)      | 175 mA (typical)   |
| Standby Current (idle) at Nominal Voltage (5.0V) | 90 mA (typical)  |
| Color  | Cash Register White, Twilight Black  |
| Supported Host Interfaces                        | USB, RS232, Keyboard Wedge, TGCS (IBM) 46XX over RS485                     |
| Keyboard Support                                 | Supports over 90 international keyboards                                   |
| User Indicators                                  | Direct decode indicator, good decode LEDs, beeper (adjustable tone/volume) |

## Performance Characteristics

|                        |                                   |
|------------------------|-----------------------------------|
| Light Source           | 650 nm Laser Diode Class 2        |
| Scan Pattern           | Single line                       |
| Scan Speed             | 100 scans per second              |
| Scan Angle             | 35°                               |
| Minimum Print Contrast | 20% minimum reflective difference |
| Skew Tolerance         | ± 10°                             |
| Pitch Tolerance        | ± 65°                             |
| Roll Tolerance         | ± 60°                             |

## User Environment

|                               |   |
|-------------------------------|---|
| Operating Temperature         | 32° to 122° F/0° to 50° C   |
| Storage Temperature           | -40° to 158° F/-40° to 70° C  |
| Humidity                      | 5% - 95% RH, non-condensing   |
| Drop Specification            | Designed to withstand multiple drops at 5.0 ft./1.5 m to concrete   |
| Tumble Specification          | Designed to withstand 500 tumbles in 1.64 ft./0.5 m tumbler   |
| Environmental Sealing         | IP30  |
| Electrostatic Discharge (ESD) | ESD per EN61000-4-2, +/-15 KV Air, +/-8 KV Direct, +/-8 KV Indirect   |
| Ambient Light Immunity        | 0 to 8,000 Foot Candles / 0 to 86,080 Lux; tolerant to typical artificial indoor and natural outdoor (direct sunlight) lighting conditions; Fluorescent, Incandescent, Mercury Vapor, Sodium Vapor, LED4: 450 Ft. Candles (4,844 Lux) Sunlight: 8000 Ft. Candles (86,111 Lux) |

## Accessories

|                        |
|------------------------|
| Gooseneck Intellistand |
|------------------------|

## Regulatory

|                   |  |
|-------------------|--|
| Electrical Safety | EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + AC 2011; IEC 60950-1: 2005 + A1: 2009; UL 60950-1, second edition; CAN/CSA-C22.2 No. 60950-1-07  |
| EMI/RFI           | FCC 47 CFR Part 15, Subpart B, Class B; ICES-003 Issue 4, Class B; Compliant with EMC Directive 2004/108/EC  |
| Laser Safety      | CDRH Class II; IEC Class 2   |
| Environmental     | Compliant with RoHS Directive 2011/65/EU; EN 50581: 2012   |
|                   | Visit <a href="http://www.zebra.com/ls2208">www.zebra.com/ls2208</a> for complete regulatory information. For countries outside USA, Canada, European Economic Area or Australia, consult your local Zebra representative. |

## Utilities And Management

|                                  |   |
|----------------------------------|---|
| 123Scan                          | Programs scanner parameters, upgrades firmware, provides scanned bar code data and prints reports. For more information, visit <a href="http://www.zebra.com/123Scan">www.zebra.com/123Scan</a>                             |
| Symbol 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>   |

## Warranty

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| Subject to the terms of Zebra's hardware warranty statement, the LS2208, is warranted against defects in workmanship and materials for a period of five years from the date of shipment. Limited lifetime warranty on the scan element. Complete Zebra hardware product warranty statement: <a href="http://www.zebra.com/warranty">www.zebra.com/warranty</a> |
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## Recommended Services

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|---|
| Zebra OneCare Select; Zebra OneCare Service Center Select |
|---|

## Decode Ranges (Typical\*)

| Symbology/Resolution | Near/Far                     |
|----------------------|------------------------------|
| Code 39: 3 mil       | 1.6 - 4.8 in./4.1 - 12.2 cm  |
| Code 39: 4 mil       | 1.3 - 8.7 in./3.3 - 22.1 cm  |
| Code 39: 5 mil       | 0.9 - 11.7 in./2.3 - 29.7 cm |
| Code 39: 7.5 mil     | 0.1 - 19.1 in./0.3 - 48.5 cm |
| Code 39: 20 mil      | 0 - 33.8 in./0 - 85.9 cm     |
| Code 39: 40 mil      | 1 - 43.1 in./2.5 - 109.5 cm  |

## Markets and Applications

### Retail

- Point of Sale (PoS)
- In-store inventory tracking
- 1D loyalty card processing
- 1D paper coupon redemption

### Education

- Library book checkout
- Inventory and asset tracking

## Symbol Decode Capability

|                            |  |
|----------------------------|--|
| Scanning Technology        | 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). Refer to Product Reference Guide for complete list of symbologies. |
| Minimum Element Resolution | Code 39: 3.0 mil   |

## Decode Ranges (Typical\*)

|                    |  |
|--------------------|--|
| UPC: 13 mil (100%) | 0 - 25.1 in./0 - 63.8 cm                                     |
|                    | * Printing resolution, contrast and ambient light dependent. |