

# 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
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## 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

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

Zebra OneCare Select; Zebra OneCare Service Center Select
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## 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.