



# Symbol LS3408-FZ

## Rugged handheld scanner

### Reads damaged 1-D bar codes for maximum industrial productivity

The rugged LS3408-FZ handheld scanner features fuzzy logic technology for fast and accurate reading of damaged, dirty and poorly printed one-dimensional (1-D) bar codes typically found in industrial environments. In the yard, warehouse, distribution center, manufacturing plant or retail store, the LS3408-FZ handheld scanner offers superior performance, reliability and user-friendly ergonomics to improve productivity. Multiple on-board interfaces ensure flexible plug-and-play host connectivity.

### Advanced data capture technology for tough environments

As innovative as it is rugged, the LS3408-FZ delivers the ergonomic and operational features for scan intensive industrial applications. Industry-leading impact tests ensure reliable performance in spite of the inevitable accidental drops. The device is impervious to dust and water, and its exit window is scratch-resistant and recessed for the highest level of durability. As a result, you avoid unnecessary equipment downtime or expensive equipment replacement costs. For applications requiring quick access and convenient storage, the LS3408-FZ features a built-in metal hook for attachment to a pulley. Two large LED-enhancing windows and extra loud 80 decibel (db) beeper are strategically placed on the scanner to ensure that decode feedback is clearly visible and audible to users.

### Capturing mission-critical information the smart way

The standard range LS3408-FZ is designed specifically for industrial applications. When you choose the LS3408-FZ, you receive the added assurance of purchasing from Zebra — a company with proven advanced data capture capabilities and millions of scanner installations worldwide.

For more information on the rugged LS3408-FZ handheld scanner and the full line of accessories, access our global contact directory at [www.zebra.com/contact](http://www.zebra.com/contact) or visit us on the web at [www.zebra.com/ls3408fz](http://www.zebra.com/ls3408fz)

## Symbol LS3408-FZ Specifications

| PHYSICAL CHARACTERISTICS    |   |
|-----------------------------|---|
| <b>Dimensions:</b>          | 7.34 in. H x 4.82 in. W x 2.93 in. D<br>18.65 cm H x 12.25 cm W x 7.43 cm D                                     |
| <b>Weight (w/o cable):</b>  | 12.35 oz./350 g   |
| <b>Power Requirements:</b>  | 4.5 - 14 VDC  |
| <b>Stand-by Current:</b>    | 50 mA   |
| <b>Power Sources:</b>       | Depending on host: <ul style="list-style-type: none"><li>• Host power</li><li>• External power supply</li></ul> |
| <b>Color:</b>               | Twilight Black/Yellow   |
| PERFORMANCE CHARACTERISTICS |   |
| <b>Scanner Type:</b>        | Retrocollective   |
| <b>Light Source:</b>        | 650 nm visible laser diode  |
| <b>Scan Repetition:</b>     | 36 scans per second typical   |

| USER ENVIRONMENT                   |  |
|------------------------------------|--|
| <b>Operating Temp.:</b>            | -22° to 122° F/-30° to 50° C   |
| <b>Storage Temp.:</b>              | -40° to 158° F/-40° to 70° C   |
| <b>Humidity:</b>                   | 5% to 95% relative humidity, non-condensing  |
| <b>Sealing:</b>                    | Sealed to IP65 specifications  |
| <b>Drop Specifications:</b>        | Unit functions normally after 50 drops to concrete from 6.5 ft. (2m)   |
| <b>Ambient Lighting Tolerance:</b> | 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) |
| <b>Electrostatic Discharge:</b>    | Conforms to 20 kV air discharge and 8 kV of contact discharge  |



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### FEATURES

#### High-performance scanner with fuzzy

Premium scanning for all 1-D codes including poorly printed, damaged or low contrast bar codes

#### Ergonomic, rugged industrial design withstands up to 50 drops to concrete from 6.5 ft. (2m) and 2,500 3 ft. (1m) tumbles (5,000 hits)

Reduces user fatigue and ensures less down time due to accidental drops

#### IP65 sealing rating (electronic enclosure)

Protects against water and dust to ensure reliable performance in harsh industrial conditions

#### Bright LED and beeper with adjustable volume

Multiple modes of confirmation ensure positive user feedback in noisy environments

#### Bright 650nm laser aiming dot

Delivers clearly visible line for precise, accurate bar code data capture

#### Supports GS1 DataBar Symbologies (formerly RSS)

|                              |  |
|------------------------------|--|
| <b>Min. Element Width:</b>   | 5 mil/0.127 mm   |
| <b>Print Contrast:</b>       | 25% minimum reflective difference  |
| <b>Roll (Tilt):1</b>         | ± 20° from normal  |
| <b>Pitch:2</b>               | ± 65° from normal  |
| <b>Skew (Yaw):3</b>          | ± 50° from normal  |
| <b>Decode Capability:</b>    | UPC/EAN, UPC/EAN with Supplementals, GS1-128 (formerly UCC/EAN 128), JAN 8 & 13, Code 39, Code 39 Full ASCII, Code 39 Trioptic, Code 128, Code 128 Full ASCII, Codabar (NW7), Interleaved 2 of 5, Discrete 2 of 5, Code 93, MSI, Code 11, Code 32, Bookland EAN, IATA, GS1DataBar (formerly RSS) |
| <b>Interfaces Supported:</b> | RS232, Keyboard Wedge, Wand Emulation, Scanner Emulation, IBM 468X/469X, USB and Synapse   |

\* Minimum distance determined by symbol length and scan angle

## REGULATORY

|                        |  |
|------------------------|--|
| <b>Input Transient</b> | IEC 1000-4-(2,3,4,5,6,11)  |
| <b>EMI/RFI:</b>        | FCC Part 15 Class B, ICES-003 Class B, European Union EMC Directive, Japan VCCI/MITI/Dentori |
| <b>Laser Safety:</b>   | IEC825-1 CLASS 2   |

## WARRANTY

The LS3408-FZ is warranted against defects in workmanship and materials for a period of 3 years (36 months) from date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions. See full warranty for details.

- 1 - Roll (Tilt): Controlled by rotating the wrist clockwise or counterclockwise
- 2 - Pitch: Controlled by dropping or raising the wrist
- 3 - Skew (Yaw): Controlled by rotating the wrist from left to right or vice versa
- 4 - LED lighting with high AC ripple content can impact scanning performance

Compatibility with emerging symbologies helps you to leverage your hardware investment

## Global Trade Item Number™ (GTIN™) compliant

Decodes and transmits 14-digit GTINs where appropriate

## Advanced data formatting

Eliminates costly modifications to the host software

## Flash memory

Facilitates updates/customization of product in the field

## Universal cable set

Allows for easy replacement and/or upgrades

## Multiple onboard interfaces

Ensures flexible connectivity, allowing for host "future proofing"

## Hands-free Intellistand™ (optional)

Enables presentation scanning and easy switching between hands-free and handheld modes

## DEPTH OF FIELD

| LABEL DENSITY     | LS3408-FZ      |                   |
|-------------------|----------------|-------------------|
|                   | English        | Metric            |
| Paper Label       |                |                   |
| Code 39 – 5 mil   | 2.50" – 7.25"  | 6.35 – 18.42 cm   |
| Code 39 – 7.5 mil | 2.00" – 15.75" | 5.08 – 40.00 cm   |
| 100% UPC – 13 mil | 1.00" – 24.00" | 2.54 – 60.96 cm   |
| Code 39 – 20 mil  | 0 – 39.50"     | 0 – 100.33 cm     |
| Code 39 – 40 mil  | 2.00" – 67.00" | 5.08 – 170.18 cm  |
| Code 39 – 55 mil  | 4.00" – 84.00" | 10.16 – 213.36 cm |

For more detailed information, please see the Product Reference Guide in the Resource tab at [www.zebra.com/ls3408fz](http://www.zebra.com/ls3408fz)



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