

## LS 3408FZ Scanner

Rugged Scanner Built for Industrial Applications

### Reads Damaged 1D Bar Codes for Maximum Industrial Productivity

The rugged LS 3408FZ handheld scanner from Symbol Technologies, the Enterprise Mobility Company™, features fuzzy logic technology for fast and accurate reading of damaged, dirty and poorly printed one-dimensional (1D) bar codes typically found in industrial environments.

In the yard, warehouse, distribution center, manufacturing plant or retail store, the LS 3408FZ 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 LS 3408FZ delivers the ergonomic and operational features for scan intensive industrial applications. The scanner's exit window is scratch-resistant and recessed for the highest level of durability and minimal downtime. In fact, the LS 3408FZ even maintained its reliability when subjected to multiple drops in a tumble test conducted in the widely recognized Symbol Industrial Design Labs.

For applications requiring quick access and convenient storage, the LS3408FZ 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 LS 3408FZ from Symbol Technologies, the Enterprise Mobility Company, was designed specifically for industrial applications. When you choose the LS 3408FZ, you receive the added assurance of purchasing from Symbol—a company with proven advanced data capture capabilities and millions of scanner installations worldwide.

For more information on the rugged LS 3408FZ handheld scanner and the full line of accessories, contact us at +1.800.722.6234 or +1.631.738.2400, or visit us on the web at [www.symbol.com/ls3408fz](http://www.symbol.com/ls3408fz)

Features	Benefits
High-performance scanner with fuzzy logic decode capability	Premium scanning for all 1D codes including poorly printed, damaged or low contrast bar codes
Ergonomic, rugged design withstands multiple 6.5 ft./2m drops to concrete; 2,500 3.5-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 Reduced Space Symbolologies® (RSS)	Compatible 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

# LS 3408FZ Specification Highlights

## Market: Manufacturing

### Applications

Shop floor management  
Inventory control  
Asset tracking  
Document control  
Manufacturing  
Clean room  
Assembly line processes

### User

Assembly line worker  
Shipping/receiving personnel

## Market: Warehousing

### Applications

Warehouse management  
Inventory management  
Order processing  
Cold storage  
Shipping and receiving  
Forklift

### User

Warehouse personnel

## Market: Retail GM

### Applications

POS applications  
Lumber yards  
Warehouse  
Do-it-yourself home centers

### User

Sales associate  
Receiving dock personnel

## Physical Characteristics

Dimensions:	7.34 in. H x 4.82 in. W x 2.93 in. D 18.65 cm H x 12.25 cm W x 7.43 cm
Weight (without cable):	12.35 oz./350 gm
Power Requirements:	4.5 – 14VDC
Stand-by Current	50mA
Power Sources:	Depending on host: • Host power • External power supply
Color:	Twilight Black/Yellow

## Performance Characteristics

Scanner Type:	Retrocollective
Light Source:	650 nm visible laser diode
Scan Repetition:	36 scans per second typical
Minimum Element Width:	5 mil/0.127 mm
Nominal Working Distance:	See Decode Zone
Print Contrast:	25% minimum reflective difference
Roll (Tilt): 1	+/- 20 degrees from normal
Pitch: 2	+/- 65 degrees from normal
Skew (Yaw): 3	+/- 50 degrees from normal
Decode Capability:	UPC/EAN, UPC/EAN with Supplementals, 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, UCC/EAN RSS and RSS variants
Interfaces Supported:	RS232, Keyboard Wedge, Wand Emulation, Scanner Emulation, IBM 468X/469X, USB and Synapse

## User Environment

Operating Temperature:	22° to 122° F/-30° to 50° C
Storage Temperature:	40° to 158° F/-40° to 70° C
Humidity:	5% to 95% relative humidity, noncondensing
Sealing:	Sealed to IP65 specifications
Drop Specifications:	Unit functions normally after repeated 6.5 ft./2 m drops to concrete
Ambient Light Immunity:	Immune to direct exposure of normal office and factory lighting conditions, as well as direct exposure to sunlight: Indoor: 450 ft. candles/4,842 LUX Outdoor: 8,000 ft. candles/86,080 LUX
Electrostatic Discharge:	Conforms to 20 kV air discharge and 8 kV of contact discharge

## Regulatory

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

## Warranty

The LS 3408FZ 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



Specifications are subject to change without notice. Symbol® and Enterprise Mobility Company™ are registered trademarks of Symbol Technologies, Inc. All other trademarks and service marks are proprietary to their respective owners. For system, product or services availability and specific information within your country, please contact your local Symbol Technologies office or Business Partner.

### Corporate Headquarters

**Symbol Technologies, Inc.**  
One Symbol Plaza  
Holtsville, NY 11742-1300  
TEL: +1.800.722.6234/+1.631.738.2400  
FAX: +1.631.738.5990

### For Asia Pacific Area

**Symbol Technologies Asia, Inc.**  
(Singapore Branch)  
Asia Pacific Division  
230 Victoria Street #05-07/09  
Bugis Junction Office Tower  
Singapore 188024  
TEL: +65.6796.9600  
FAX: +65.6337.6488

### For Europe, Middle East and Africa

**Symbol Technologies**  
EMEA Division  
Symbol Place, Winnersh Triangle  
Berkshire, England RG41 5TP  
TEL: +44.118.9457000  
FAX: +44.118.9457500

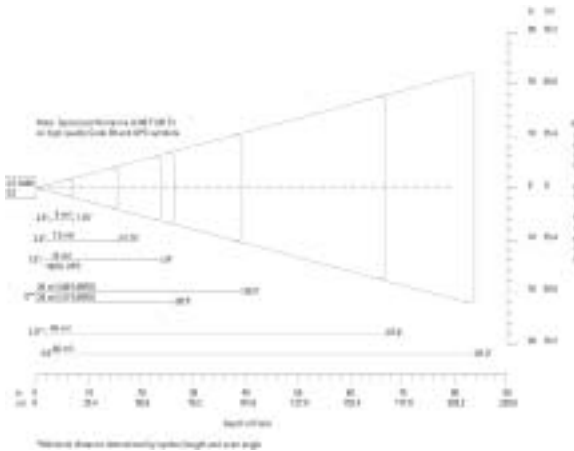
### For North America, Latin America and Canada

**Symbol Technologies**  
The Americas  
One Symbol Plaza  
Holtsville, NY 11742-1300  
TEL: +1.800.722.6234/+1.631.738.2400  
FAX: +1.631.738.5990

### Symbol Website

For a complete list of Symbol subsidiaries and business partners worldwide contact us at: [www.symbol.com](http://www.symbol.com)  
Or contact our pre-sales team at: [www.symbol.com/sales](http://www.symbol.com/sales)

## 1D Decode Zone for LS 3408FZ



Part No. LS3408FZ Printed in USA 05/04 © Copyright 2004 Symbol Technologies, Inc. All rights reserved. Symbol is an ISO 9001 and ISO 9002 UKAS, RVC, and RAB Registered company, as scope definitions apply.

