Symbol LS3578-FZ

Rugged, cordless scanner with integrated Bluetooth

Accurately scan damaged or poorly printed bar codes

The LS3578-FZ cordless scanner provides fuzzy logic technology, enabling you to rapidly and accurately read damaged, dirty and poorly printed one-dimensional (1-D) bar codes often found in industrial environments. In the yard, warehouse, distribution center, manufacturing plant or retail store, the LS3578-FZ offers superior performance and reliability as well as a user-friendly form factor that helps ensure comfortable use over long shifts. Plus, integrated Bluetooth provides reliable and secure wireless data transmission between the scanner and host, including Zebra's rugged VC5090 Vehicle-Fixed Mount Mobile Computer.

Cordless freedom for improved productivity

With no cord between the scanner and host, employees can move freely throughout their work environment, increasing productivity and efficiency while keeping supply chain inventory up to date at all times. Plus, having no cord reduces downtime from cable breakdowns -- a common point of failure in handheld devices used in industrial facilities.

Rugged design to maximize uptime

As rugged as it is innovative, the LS3578-FZ is designed for scan-intensive industrial applications in the harshest operating conditions. 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.

Low total cost of ownership (TCO)

In addition to enhancing productivity, the LS3578-FZ offers a low TCO. The industrial-strength construction maximizes the scanner's working life, and multiple on-board interfaces provide true plug-and-play simplicity with your host system today and tomorrow. Support for Remote Scanner Management (RSM) enables you to discover, provision and upgrade devices from a central remote location, dramatically reducing management time and costs. And since even the most rugged devices require a support plan, a full complement of Enterprise Mobility Services are available to help you protect your investment and maintain peak performance.

For more information, visit us at **www.zebra.com/ls3578fz**

LS3578-FZ Specifications

PHYSICAL CHARACTERISTICS

Dimensions:	7.34 in. L x 4.82 in. W x 2.93 in. D (18.65 cm H x 12.25 cm W x 7.43 cm D)
Weight: (including LiON battery)	14.6 oz. (414 gm)
Battery:	2200 mAh Lithium Ion Battery
Battery charge time:	Fully charged (100%) in 3 hours
Color:	Twilight Black and Yellow

PERFORMANCE CHARACTERISTICS

Scanner type:	Retrocollective
Light source:	650 nm visible laser diode

CRADLES

Power requirements:	4.75 – 14 VDC (STB 3508 and FLB 3508) 4.75 – 14 VDC (STB 3578 and FLB 3578)
Typical current draw:	
Not charging	**STB 3508 and FLB 3508** 10 mA **STB 3578 and FLB 3578** 105 mA @5V 45 mA @9V
Fast rate charge	**STB 3508 and FLB 3508** 915 mA @5V 660 mA @9V **STB 3578 and FLB 3578** 915 mA @5V 660 mA @9V
Slow rate charge	**STB 3508 and FLB 3508**

FEATURES

High performance scanner with fuzzy logic decode capability

Quickly and accurately scans all 1-D bar codes on the first scan, including poorly printed, dirty, damaged or low-contrast bar codes

Integrated Bluetooth Class 2 v1.2 (Serial Port and HID Profiles with authentication and security)

Cordless scanning with secure wireless data transmission

Cordless scanning

Enables real-time bar code data collection unrestricted by a cable, reducing repairs from cable failure

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)

Ensures maximum reliability with less downtime resulting from accidental drops

IP65-rated seal (electronic enclosure)

Protects against water and dust for reliable performance in the harshest environments

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 Supplemental, 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, Code 11, Code 32, Bookland EAN, IATA, GS1DataBar (formerly RSS)
Interfaces supported:	RS232, Keyboard Wedge, IBM 468X/469X, USB and Synapse

USER ENVIRONMENT

Operating temperature:	-4˚ to 122˚F (-20˚ to 50˚C)
Storage temperature:	-40˚ to 140˚F (-40˚ to 60˚C)
Humidity:	5% to 95% relative humidity, noncondensing
Sealing:	Sealed to IP65 specifications
Drop specifications:	Unit functions normally after 50 drops to concrete from 6.5 ft. (2m)
# of Cradle Insertions:	250,000+ insertions
Ambient lighting tolerance:	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)
Electrostatic discharge:	Conforms to 20 kV air discharge and 8 kV of contact discharge

480 mA @5V
345 mA @9V
STB 3578 and FLB 3578
480 mA @5V
345 mA @9V

RADIO SPECIFICATION

Radio:	Bluetooth, Class 2, Version 1.2, Serial port and HID Profiles
Frequency:	2.402 to 2.480 GHz adaptive frequency hopping (co-existence with 802.11 wireless networks)
Data rate:	720 kbps
Radio Range:	Up to 300 ft. (100m) direct line of sight in open air; typical indoor cordless range is100 ft. (33m), but will vary depending upon environment; see Bluetooth Radio Performance Technical Brief for more information

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 LS3578-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.

RECOMMENDED SERVICE

Service from the Start - Bronze
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

Bright LED and beeper with adjustable volume
Helps ensure that decode feedback is clearly visible and audible to users, even in noisy environments

Multi-point communication
Use up to three scanners with a single cradle, reducing capital expenditures and maintenance costs

Bright 650 nm laser aiming dot
Delivers clearly visible line for more accurate scanning

Supports GS1DataBar Symbologies (formerly RSS)
Ensures compatibility with emerging symbols to protect your hardware investment

Advanced data formatting
Eliminates costly modifications to the host software

Batch mode operation
Increases application design flexibility to better meet your specific needs

Remote scanner management ready
Enables you to discover, provision and upgrade devices from a central remote location, reducing management time and costs

Depth of Field

LABEL DENSITY	LS3578-FZ	
Paper Label	English	Metric
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/ls3578fz**

ZEBRA TECHNOLOGIES