Symbol LS4278

Cordless handheld scanner

FEATURES

Bluetooth Class 2 v1.2 (Serial Port & HID Profiles with authentication and security)
Cordless scanning with secure wireless transmission of data

Multi-line rastering scan pattern
Eliminates the need for exact aim and positioning for superior scanning accuracy

Remote scanner management (RSM) ready
Discover, provision and upgrade devices from a central remote location; dramatically reduces management effort and costs

Long life industrial charging contacts
Reliable performance, rated to 250,000+ insertions

Patented, single circuit-board
Lowers TCO by eliminating a major source of vulnerability

Cordless freedom improves productivity and protects profitability

Motorola's cordless Symbol LS4278 provides superior bar code scanning in a durable future-proof device that delivers an outstanding total cost of ownership. Workers can move within a 50 ft./15 m radius to scan items — and the elimination of hazardous cables creates a safer work environment. From cashiers moving around the register to scan large, heavy items and check for missed items to healthcare workers double checking that the right patient is receiving the right medication, integrated Bluetooth wireless personal area networking (WPAN) provides reliable and secure wireless transmission of data between the scanner and your host. Productivity is improved, revenues are protected and potential liability due to injury from lifting heavy objects is reduced.

Outstanding scanning performance

The Symbol LS4278 is designed to deliver exceptional scanning performance. Users can scan objects at any angle — the innovative multi-line rastering scan pattern eliminates the need for exact aim and positioning of the scanner. The laser line moves vertically during scanning, allowing accurate capture of even the smallest, stacked and poorly printed bar codes on the first scan. And with superior motion tolerance, users no longer need pause between scans, further increasing productivity.

A new level of durability — and a lower TCO

The Symbol LS4278 scanner and cradle are designed to withstand all day every day use, from drops to spills, with features that deliver maximum uptime and investment protection. The scanner's patented single board construction eliminates the most common point of failure — the interconnection between multiple boards. Even if the scanner is accidentally dropped, a five-foot (1.5m) drop specification ensures continuous reliable operation. The scanner and cradle offer industrial charging contacts that eliminate wear when cradling the device, providing a reliable charging connection through hundreds of thousands of insertions — other common charging techniques show wear between 5,000 to 10,000 insertions. Drain points are designed into the cradle to protect sensitive internal electronics from accidental liquid spills. Built-in enterprise durability combines with Motorola's Enterprise Mobility Services to deliver a low total cost of ownership. These comprehensive services are available to assist in rapid deployment as well as provide the ongoing support you need to maintain peak performance — and achieve maximum uptime and value.

For more information on the LS4278, visit www.motorolasolutions.com/LS4278 or access our global contact directory at www.motorolasolutions.com/enterprise/contactus

Wide working range
Reads good and poor quality bar codes at similar ranges, reducing the need for the user to move the scanner back and forth

Superior motion tolerance
Eliminates the need to pause between scans

Withstands 5 ft./1.5 m drops to concrete
Protects against downtime from breakage due to everyday drops

Powered through host cable
Eliminates need for a power supply; simplifies installation

Plug-and-play; universal cable
Rapid deployment; single cable connects to any computing environment

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

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

Vertical or horizontal mounting
Provides versatility to accommodate your unique environment

Symbol LS4278 Specifications

Physical Characteristics	
Dimensions:	Scanner: 7.3 in. H x 3.85 in. L x 2.7 in. W/ 18.5 cm H x 9.7 cm L x 6.9 cm W Cradle: 2.0 in. H x 8.35 in. L x 3.4 in./ 5 cm H x 21.1 cm L x 8.6 cm W
Weight:	Scanner: ~8.4 oz./238 g; Cradle: ~6.4 oz./183 g
Mounting Options:	Cradle supports vertical or horizontal positions
Voltage & Current:	Voltage / Current (Charging/Non Charging) (Cradle) 5+/-10% VDC 620mA / 70mA with external power 5+/-10% VDC 450mA / 70mA with host power through cable 12+/-10% VDC 270mA / 50mA with external power 12+/-10% VDC 230mA / 50mA with host power through cable
Color:	Cash Register White (shown) or Twilight Black

Performance Characteristics	
Light Source:	650 nm laser diode
Scan Element Frequency:	50Hz
Decode Rate:	200 decodes per second
Radio Range:	Minimum 33 ft./10 m; typical warehouse environment 50 ft./15 m
Battery Specifications:	720 maH NiMH - (3) AAA Number of scans per full charge: 32,000+ @ 1 scan/second Charge time: Fully discharged battery: < 3 hours via external power / ~4.5 hours via host power through cable (Note: Typical daily scans are less than 4,000, which fully charges within 1 hour)
Roll / Pitch / Yaw:	+/- 35° / 60° / 60°
Nominal Working Distance:	See chart below
Print Contrast:	25% minimum reflectance
Multi-Line Aiming Coverage:	At 5 in./12.7 cm reading distance: ~ 0.5 in./1.3 cm At 10 in./25.4 cm reading distance: ~ 1 in./2.5 cm
Motion Tolerances:	Horizontal velocity: 200 in./508 cm per second Vertical velocity: 200 in./508 cm per second Angular velocity: 200 in./508 cm per second
Decode Capability:	UPC/EAN and with supplementals, Code 39, Code 39 Full ASCII, Tri-optic Code 39, GS1 DataBar (formerly RSS) variants,, UCC/EAN 128, Code 128, Code 128 Full ASCII, Code 93, Codabar (NW1), Interleaved 2 of 5, Discrete 2 of 5 MSI, Codell, IATA, Bookland EAN, Code 32
Interfaces Supported:	LS4278 cradle features on-board multiple interface with: RS-232C (Standard, Nixdorf, ICL and Fujitsu); IBM 468x/469x; keyboard wedge; USB (Standard, IBM SurePOS, Macintosh); laser/wand emulation. In addition, Synapse adaptive connectivity allows for connectivity to all of the above plus many non-standard interfaces.

User Environment	
Operating Temperature:	32° to 122° F/0° to 50° C
Storage Temperature:	-40° to 158° F/-40° to 70° C
Humidity:	5% to 95% non-condensing
Drop Specifications:	Withstands multiple 5 ft./1.5 m drops to concrete
# 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, LED[1]: 450 Ft Candles (4,844 Lux) Sunlight: 8000 Ft Candles (86,111 Lux)

Regulatory	
Electrical Safety:	UL1950, CSA C22.2 No. 950, EN60950/IEC950
Laser Safety:	CDRH Class II, IEC Class 2
EMI/RFI:	FCC Part 15 Class B, ICES-003 Class B, European Union EMC Directive, Australian SMA
Radio:	Bluetooth, Class 2, Version 1.2, Serial Port & HID Profiles 2.402 to 2.480 GHz Adaptive Frequency Hopping (co-existence with 802.11 wireless networks) Data rate: 720 kbps

Accessories	
Brackets:	Desktop/wall-mount bracket
Power Supplies:	Power supplies are available for applications that do not supply power over the host cable

Warranty

Subject to the terms of Motorola's hardware warranty statement, the Symbol LS4278 handheld scanner products are warranted against defects in workmanship and materials for a period of three years from the date of shipment. The Liquid Polymer Scan Element includes an unprecedented limited lifetime warranty. For the complete Motorola hardware product warranty statement, go to: http://www.motorolasolutions.com/warranty.

1 - LED lighting with high AC ripple content can impact scanning performance

	Depth of Field	
Label Density	**LS4278**	
Paper Label	**English**	**Metric**
Code 39 – 5 mil	1.50" – 5.50"	3.81 – 13.97cm
100% UPC/EAN – 13 mil	0 – 19.00"	0 – 48.25cm
Code 39 – 10 mil	0 – 14.00"	0 – 35.56cm
Code 39 – 20 mil	0 – 29.00"	0 – 73.66cm

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