



**GENERAL PURPOSE CORDLESS LINEAR IMAGER**

# MOTOROLA LI4278

**THE NEXT GENERATION IN 1D SCANNING**

The LI4278 takes 1D bar code scanning to the next level, allowing workers to scan faster and farther. Workers can capture virtually any 1D bar code — including the typical bar codes that are printed on paper labels; electronic bar codes displayed on the screen of a mobile phone, tablet or computer that allows retailers to easily process loyalty cards, mobile coupons and more; and the high density (HD) bar codes commonly used in electronic component manufacturing. 100 percent UPC bar codes can be captured from near contact to over 30 in./76.2 cm away, while 200% UPC codes can be scanned at 55 in./139.7 cm away. Since bar codes can be captured at extreme angles, scanning is easier than ever, so workers spend less time maneuvering the scanner and more time on task. And an optional cradle that enables presentation mode gives your workers the flexibility to use the scanner in handheld and hands-free modes.

**CORDLESS FREEDOM**

Bluetooth® frees workers from cords, allowing cashiers to easily scan items inside and outside of the cash wrap. In addition, Bluetooth v2.1 with EDR provides better encryption for improved security; better wireless performance; better energy management to preserve power for a full shift and easy pairing with the host device.

**BUILT FOR ALL DAY EVERYDAY USE**

A patent pending single circuit board improves reliability by eliminating interconnections. Superior battery power management delivers the largest number of scans per battery charge to support scan intensive applications. You can use it in dusty and wet environments. The scan line is easy to see outdoors in bright sunlight as well as indoors in dim lighting. It can survive drops to concrete. And both cradles can handle over a quarter million insertions.

**COST EFFECTIVE UPGRADE PATH**

The LI4278 provides a positive return on investment by utilizing the same existing cradles and accessories as its cousins, the LS4278 and DS6878. Current investments are preserved, yet you can easily migrate to the latest in scanning technology.

**MAXIMUM UPTIME FOR A LOW TCO**

Remote management tools combine with industry leading all-inclusive affordable service plans to keep devices in the hands of your workforce practically every minute of every working day. Service from the Start Advance Exchange Support provides next-business-day replacement of devices that require repair. Built-in Comprehensive Coverage protects your scanners from the unexpected, significantly reducing unforeseen repair expenses and delivering service peace of mind from the moment you purchase the device.

**FEATURES**

**Excellent 1D scanning performance**

Delivers superior scanning speed and a wide data capture range

**Captures virtually all 1D bar codes on any surface — including mobile phone displays**

Capture bar codes printed on traditional paper labels or displayed on the screen of a mobile phone, tablet or computer

**Wide working range**

Reads UPC bar codes from 1 in./2.54 cm to over 30 in./76.2 cm as well as high density codes and extended ranges for greater application flexibility

**Superior motion and angular tolerance**

Bar codes can be captured faster, and there is no need to pause between scans

**Patent pending single circuit board construction**

Maximizes durability and reduces downtime

**Bright crisp aiming line**

Easier to aim in bright or dim lighting environments

## PHYSICAL CHARACTERISTICS

Dimensions	3.84 in. H x 2.75 in. W x 7.34 in. L 9.8 cm H x 7 cm W x 18.6 cm L
Weight	7.9 oz./224 grams
Cradle Interface	RS232, RS485 (IBM), USB, Keyboard Wedge
Color	Black; White
Battery	Rechargeable replaceable battery with 'green sustainability'

## PERFORMANCE CHARACTERISTICS

Skew Tolerance	±65°
Pitch Tolerance	±65°
Roll Tolerance	±45°
Scan Pattern	Single bright aiming line
Scan Angle	Horizontal 35°
Scan Speed	547 scans per second
Motion Tolerance	25 in./ 63.5 cm per second
Light Source	LED Class 1 device 617nm (amber)
Min. Print Contrast	15% MRD
Scans Per Charge	Up to 57,000
Hours of Operation	Per full charge: 72 hours

## USER ENVIRONMENT

Ambient Light Immunity	Max 108,000 lux
Operating Temp.	32° F to 122° F/ 0° C to 50° C
Storage Temperature	-40° F to 158° F/-40° C to 70° C
Humidity	5% to 85% RH, non-condensing
Drop Specification	Over 100 drops at 5 ft./1.5 m at room temperature; survives 6ft./1.8 m drops to concrete
Environmental Sealing	Gasket sealed housing withstands dust and can be sprayed clean

Bar Code Symbolologies	UPC/EAN: UPC-A, UPC-E, UPC-E1, EAN-8/JAN 8, EAN-13/JAN 13, Bookland EAN, Bookland ISBN Format, UCC Coupon Extended Code, ISSN EAN Code 128 Including GS1-128, ISBT 128, ISBT Concatenation, Code 39 including Trioptic Code 39, Convert Code 39 to Code 32 (Italian Pharmacy Code), Code 39 Full ASCII Conversion Code 93 Code 11 Matrix 2 of 5 Interleaved 2 of 5 (ITF) Discrete 2 of 5 (DTF) Codabar (NW - 7) MSI Chinese 2 of 5 IATA Inverse 1D (except all GS1 DataBars) GS1 DataBar including GS1 DataBar-14, GS1 DataBar Limited, GS1 DataBar Expanded
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## WIRELESS CONNECTIVITY

Radio	Bluetooth v2.1 Class 2 Radio
Data Rate	3.0 Mbit/s (2.1 Mbit/s) Bluetooth v2.1
Radio Range*	330 ft./100 m (line of sight)

\* Using presentation cradle configuration

## REGULATORY

Technical Requirements	EMC FCC Part 15 Class B, ICES 003 Class B, IEC 60601-1-2 Environmental RoHS Directive 2002/95/EEC Electrical Safety C22.2 No. 60950-1, EN 60950-1, IEC 60950-1, UL 60950-1 LED Class 1
Environmental	RoHS Compliant

## UTILITIES

123Scan, Remote Scanner Management (RSM), Scanner Management Services (SMS), Motorola Scanner SDK

## DECODE RANGES (TYPICAL WORKING RANGES\*\*)

3 mil	Minimum resolution
4 mil	4-10 in./10.2-25.4 cm
5 mil	3-13 in./7.6-33 cm
7.5 mil	1.5-19 in./ 3.8-48.3 cm
13 mil (100% UPC-A)	1-31 in./2.5-78.7 cm
20 mil	1-42 in./2.5-106.7 cm
26 mil (200% UPC-A)	3-55 in./7.6-140 cm
100 mil (paper)	>20 ft./6 m

\*\* Ranges are calculated on Code 39 unless otherwise noted

## WARRANTY

Subject to the terms of Motorola's hardware warranty statement, the LI4278 is warranted against defects in workmanship and materials for a period of 36 months from the date of shipment. For the complete Motorola hardware product warranty statement, go to: <http://www.motorola.com/warranty>

## Built-in rechargeable replaceable battery

Provides largest number of scans per charge — well beyond a single shift in the highest usage profiles; replaceable battery ensures long lifecycle

## Long life industrial charging contacts

Reliable performance, rated to 250,000+ insertions

## Compatible with 123Scan<sup>2</sup> and Remote Scanner Management (RSM)

Dramatically reduces management time and cost, from initial configuration to day-to-day management; SDK available for custom development

## Withstands 100+ consecutive drops to concrete

Protects against downtime from breakage due to everyday drops

## Multi point-to-point

Use up to three scanners with a single desktop cradle and seven scanners with a presentation cradle, reducing capital expenditures and maintenance costs

## Batch mode operation

Allows user to continue scanning outside communications range; can scan over 500 UPC bar codes into memory and upload automatically when in communication range

## Flexible mounting — vertical or horizontal

Desktop cradle provides versatility to accommodate your unique environment

## Bluetooth 2.1

Provides better security, better performance, better energy management and much easier pairing over the Bluetooth wireless connection

## Backward compatible

Works with LS4278 cradles, providing a very cost-effective upgrade path