



# ZEBRA SE1524ER

## OEM SCAN ENGINES

### ONE OF THE BEST WORKING RANGES — NEAR AND FAR — IN THE SMALLEST SIZE

The Zebra SE1524ER extended range scan engine provides high-performance bar code scanning in the smallest possible package. It's built for OEM applications that require easy targeting and capture of bar codes from short or long distances such as in multi-level warehouse environments. Superior first-time read rates, working range, fuzzy logic technology and affordability all combine to deliver a versatile scan engine for your OEM applications. The Zebra SE1524ER is both durable and reliable to offer premium long-range scanning performance in the toughest environments.

### BUILT FOR VERSATILITY AND PERFORMANCE

The Zebra SE1524ER scan engine gives you one of the most impressive working ranges in the industry, with the ability to read from 2 inches to 22 inches on a 7.5 mil and over 40 feet on a 100 mil reflective label. Whether scanning pallet labels on warehouse racks or shipping labels on the dock, the Zebra SE1524ER is an excellent choice for those applications that require both long- and shortrange scanning.

The Zebra SE1524ER also supports "Aim" mode, and its bright, 650 nanometer laser diode provides a highly visible scan line. The Zebra SE1524ER uses fuzzy logic decode processing for fast, accurate reading of the poorest quality bar codes. Together, these features ensure that users accurately target bar codes for easy, intuitive data capture.

For more information on how you can put cost-effective high performance scanning in your product designs, visit [www.zebra.com/se1524er](http://www.zebra.com/se1524er) or access our global contact directory at [www.zebra.com/contact](http://www.zebra.com/contact).

### FEATURES

**High-performance scan engine with fuzzy logic for reading poorly printed and low contrast across the entire decode range**

Offers excellent scanning performance on all types of 1-D bar codes

**Working range up to 45 ft./9.1 m for 100 mil reflective symbols**

Enables advanced long range scanning capability for OEM devices

**Reads 7.5 mil bar codes from 2 in. to 22 in.**

Provides an extremely versatile working range

**Special "Aim" mode**

Makes scanning from a distance easy and intuitive

**650 nm bright laser diode scanning**

Easy-to-see scan line is suitable for long distance

**Metal chassis**

Delivers the industry's highest shock rating for commercial, industrial or retail applications

**Simple serial interface (SSI) software**

Communication is easy between the scan engine software and the host

**Supports 3.3V**

Gives an extended life to your mobile applications with minimum power consumption

**Single-board design**

Compact, durable and reliable

## SPECIFICATIONS CHART

### PHYSICAL CHARACTERISTICS

**Dimensions** .8H x 1.77W x 1.375D (in)  
2.03H x 4.48W x 3.49D (cm)

**Weight** 1.4 oz./40 g

**Configuration** decoded

**Interface** SSI Control over TTL Serial on a 12 pin ZIF connector

### REGULATORY

**Classification** Intended for use in CDRH Class II and IEC Class 2 devices

**Electrical Safety** UL, VDE, and CUL recognized component laser

**Environmental** RoHS Compliant

**Ranges - 1-D codes:**  
**7.5 mil:** Code 39; 2.5:1 - 80% MRD: 2 - 22 (in) / 5.08 - 55.88 (cm)  
**10 mil:** Code 39; 2.5:1 - 80% MRD: 4 - 34 (in) / 10.16 - 86.36 (cm)  
**15 mil:** Code 39; 2.5:1 - 80% MRD: 5 - 71 (in) / 12.7 - 180.34 (cm)

### PERFORMANCE CHARACTERISTICS

**Light Source** Visible Laser Diode 650 nm

Scan Rate	35 (± 5) scans/sec (bi-directional)
Scan Angle	13.5° ± 0.7°
Scan Patterns	Linear
Minimum Print Contrast	Minimum 25% absolute dark/light reflectance measured at 650 nm
Programmable Parameters	Laser On Time, Aim Duration, Power Mode, Trigger Mode, Bi-directional Redundancy, Symbology Types/Lengths, Data Formatting, Serial Parameters, Beeper Tone, Scan Angle

**20 mil:** Code 39; 2.2:1 - 80% MRD:  
5 - 96 (in) / 12.7 - 243.84 (cm)  
**55 mil:** Code 39; 2.2:1 - 80% MRD:  
15 - 180 (in) / 38.1 - 457.2 (cm)  
**70 mil reflective:** Code 39;3:1 - 80%  
**MRD:** \* - 367 (in) / \* - 932.18 (cm)  
100 mil reflective: Code 39;3:1 - 80%  
**MRD:** \* - 542 (in) / \* - 1376.68 (cm)

\* = (near range on reflective bar codes determined by degree of reflectivity and width of bar code)

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

## USER ENVIRONMENT

Ambient Lighting Tolerance	Tolerant to typical artificial indoor and natural outdoor (direct sunlight) lighting conditions. Fluorescent, Incandescent, Mercury Vapor, Sodium Vapor, LED1 : 450 Ft Candles (4,844 Lux) Sunlight: 8000 Ft Candles (86,111 Lux)
Operating Temp.	-22° to 140° F (-30° to 60° C)
Storage Temp.	-40° to 158° F (-40° to 70° C)
Humidity	5% to 95% non-condensing
Power	Input Voltage: 3.3 VDC ± 10% Scanning Current: 210 mA typical Standby Current: 60 A max
Shock	2000 G



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ZEBRA TECHNOLOGIES