



Symbol SE1200WA/SE1223WA

OEM Scan Engines



FEATURES

53° scan angle accommodates larger bar codes within extremely close range

Perfect for high-volume, near-contact scanning applications

Reduced laser output power

Ideal for OEM designs requiring IEC Class I certification

Blink Mode for intelligent bar code sensing

Automatically triggers the scan engine for fast and reliable data capture

Compact, ergonomic design measures just 1.15 cubic inch

Easily integrates into portable and fixed mount OEM devices

Symbol SE1200WA Scan Engine is SSI compatible

Provides a migration path to other SSI scan engines with advanced features/functionality

Close contact scanning for mobile and fixed mount, high-volume OEM applications

The high-performance Symbol SE1200WA Wide Angle Scan Engine brings the benefits of bar code laser scanning to a variety of OEM devices. Now handheld computers, medical instruments, diagnostic equipment, lottery terminals, vending machines, robotics and countless other appliances can all be equipped with the leading-edge scanning technology and reliability that is available only from Motorola. The entire Symbol SE1200 Scan Engine Series — including the Wide Angle, Long Range, High Performance and Very High Density models — has been designed to provide the highest scanning performance in the smallest package possible. For added versatility, each engine is identical in size, allowing for fast, cost-effective interchangeability when upgrading or modifying your OEM device for specialized applications.

Wide ranging performance for close-contact applications

The Symbol SE1200WA Wide Angle Scan Engine features a broad 53° scan angle to accommodate larger bar codes within extremely close range. The Symbol SE1200WA is ideal for high-volume, near-contact scanning in retail checkout, warehouse and shipping applications. Measuring only 1.15 cu. in., the Symbol SE1200WA features a compact design to deliver superior performance and durability in a form factor that easily integrates into portable and

fixed mount OEM devices. Reduced laser output power makes the Symbol SE1200WA the solution of choice when your OEM design requires IEC Class I certification. The Symbol SE1200WA Wide Angle Scan Engine is available in both undecoded and decoded (Symbol SE1223WA) versions; the Symbol SE1200WA's miniature decode PC board features full-sized scanning performance. It decodes all commonly used symbologies and is easily configured using our "Simple Serial Interface."

The Symbol SE1200WA's miniature decode PC board also features a "Blink Mode" for intelligent bar code sensing. Based on our time-proven designs in handheld scanners, Blink Mode improves reliability by eliminating the use of object sensors, which can be easily fooled. This programmable trigger mode automatically detects the presence of a bar code in the scanning field of view. The Symbol SE1200WA can be programmed to use Blink Mode by the host via Simple Serial command, or by scanning a parameter bar code to automatically trigger the scan engine for fast and reliable data capture in portable or fixed mount OEM devices.

Proven technology to enhance your solutions

With millions of installations worldwide, our OEM devices are proven to deliver high reliability and superior performance, ensuring the accurate and quick capture of data and images in your mission-

SPECIFICATION SHEET

SYMBOL SE1200WA/SE1223WA
OEM scan engines

critical applications and devices. In addition, since our OEM devices are designed to ease integration, you can bring your systems to market quickly and cost-effectively. For more information about the

Symbol SE1200WA, access our global contact directory at www.symbol.com/contact or visit us on the web at www.symbol.com/se12xxwa

Symbol SE1200WA/SE1223WA Specifications

SYMBOL SE1200WA SCAN ENGINE SPECIFICATIONS (UNDECODED)

Physical Characteristics

Dimensions (max.):	.76H x 1.51W x 1.0D(in) 19.3H x 38.35W x 25.4D (mm)
Weight (max.):	1.19 oz./34 g
Configuration:	undecoded
Interface:	DPB on a 8 pin ZIF connector

User Environment

Ambient Light	Artificial: 450 ft. candles (4,844 Lux) Sunlight: 8,000 ft. candles (86,112 Lux)
Operating Temp.:	32° to 104° F (0° to 40° C)
Storage Temp.:	-40° to 140° F (-40° to 60° C)
Humidity:	5% to 95% non-condensing
Power:	Input Voltage: 3.0 - 5.5 VDC Scan Current: 65 mA typical Standby Current: 50 µA max
Shock Rating:	2,000 G

Regulatory

Laser Classification:	Intended for use in CDRH Class II and IEC Class 2 devices - Optional Class I model
Electrical Safety:	UL, VDE, and CUL recognized component laser
Environmental:	ROHS compliant

Performance Characteristics

Light Source:	Visible Laser Diode 650 nm
Scan Rate:	35 (± 5) scans/sec (bi-directional)
Scan Angle:	53° ± 2°
Scan Patterns:	Linear
Minimum Print Contrast:	Minimum 20% absolute dark/light reflectance measured at 650 nm
Ranges - 1D codes:	5 mil: Code 39 - 80% MRD: 2.0 - 4.0 (in) / 5.08 - 10.16 (cm) 7.5 mil: Code 39 - 80% MRD: 1.5 - 7.0 (in) / 3.81 - 17.78(cm) 13 mil: 100% UPC - 80 % MRD: 1.5 - 12.0 (in) / 3.81 - 17.78 (cm) 20 mil: Code 39 - 80% MRD: * - 16 (in) / * - 40.64 (cm) 40 mil: Code 39 - 80% MRD: * - 20 (in) / * - 50.8 (cm) 55 mil reflective: Code 39 - 80% MRD: * - 25 (in) / * - 63.5 (cm)

* = Near ranges on lower densities (not specified) are largely dependent upon the width of the bar code and scan angle.

SYMBOL SE1223WA SCAN ENGINE SPECIFICATIONS (DECODED)

Physical Characteristics

Dimensions (max.):	.76H x 1.51W x 1.38D (in) 19.3H x 38.35W x 35.05D (mm)
Weight (max.):	1.33 oz./37.7 g
Configuration:	decoded
Interface:	SSI Control over TTL Serial on a 12 pin ZIF connector

User Environment

Ambient Light:	Artificial: 450 ft. candles (4,844 Lux) Sunlight: 8,000 ft. candles (86,112 Lux)
Operating Temp.:	32° to 104° F (0° to 40° C)
Storage Temp.:	-40° to 140° F (-40° to 60° C)
Humidity:	5% to 95% non-condensing
Power:	Input Voltage: 5 VDC ± 10% Scan Current: 120 mA typical Standby Current: 44 µA
Shock:	2,000 G

Regulatory

Laser Classification:	Intended for use in CDRH Class II and IEC Class 2 devices - Optional Class I model
Electrical Safety:	UL, VDE, and CUL recognized component laser
Environmental:	ROHS compliant

Performance Characteristics

Light Source:	Visible Laser Diode 650 nm
Scan Rate:	35 (± 5) scans/sec (bi-directional)
Scan Angle:	53° ± 2°
Scan Patterns:	Linear
Minimum Print Contrast:	Minimum 20% absolute dark/light reflectance measured at 650 nm
Symbologies:	All major 1D bar codes
Programmable Parameters:	Laser On Time, Aim Duration, Power Mode, Trigger Mode, Bi-directional Redundancy, Symbology Types/Lengths, Data Formatting, Serial Parameters, Beeper Tone
Ranges - 1D codes:	5 mil: Code 39 - 80% MRD: 2.0 - 4.0 (in) / 5.08 - 10.16 (cm) 7.5 mil: Code 39 - 80% MRD: 1.5 - 7.0 (in) / 3.81 - 17.78(cm) 13 mil: 100% UPC - 80 % MRD: 1.5 - 12.0 (in) / 3.81 - 17.78 (cm) 20 mil: Code 39 - 80% MRD: * - 16 (in) / * - 40.64 (cm) 40 mil: Code 39 - 80% MRD: * - 20 (in) / * - 50.8 (cm) 55 mil reflective: Code 39 - 80% MRD: * - 25 (in) / * - 63.5 (cm)

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