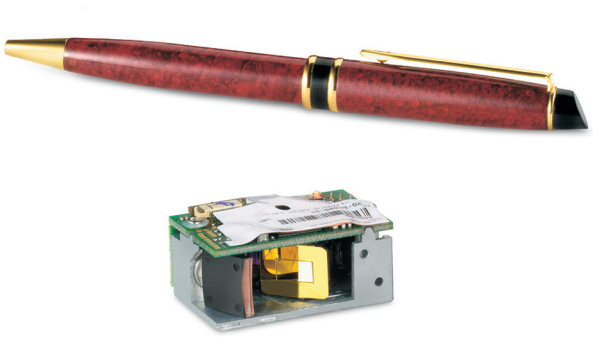
Symbol SE1224HP

OEM Scan Engines



FEATURES

High-performance reader with fuzzy logic decode capability
Premium scanning for all 1D codes including poorly printed, damaged or low contrast bar codes

Supports new RSS symbologies in addition to standard 1D symbols
Protects your investment without compromising form factor

Compact, single board design
Optimized for quick and easy integration

3.3V and 5V versions available
Supports extended portable applications

High performance decoded scan engine

The Symbol SE1224HP scan engine is built on fuzzy logic processing to deliver a new level of performance for OEM bar code scanning devices. With its flexible reading range and superior scanning of poorly printed symbols, adding this powerful decoded scan engine to your design extends the capabilities of your solution in a variety of industries and applications. 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.

Compatibility plus flexibility protects your investment

Your hardware investment is protected when you use the Symbol SE1224HP. The standard Simple Serial Interface (SSI) communication protocol ensures compatibility with our other decoded scan engines, helping save you time and money when upgrading the capabilities of your designs. The Symbol SE1224HP integrates into your device seamlessly with the dimensions of an undecoded Symbol SE1200HP and the electrical interface of a Symbol SE1223HP. The Symbol SE1224HP also supports Reduced Space Symbologies® (RSS) as well as existing 1D symbologies without compromising the form factor of your OEM device.

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-critical applications and devices. In addition, an easy-to-integrate design and expert assistance from our world-class OEM support team enable you to bring your systems to market quickly and cost effectively. For more information, access our global contact directory at www.symbol.com/contact or visit us on the web at www.symbol.com/se1224hp

Simple Serial Interface (SSI) software
Provides a migration path to other SSI scan engines with advanced features/ functionality to help you keep costs to a minimum

650 nm bright laser diode
Scan line is easy to see even in outdoor applications

Dual-scan angle switches from standard to narrow under software control
Offers fast, accurate bar code reading on menus and pick lists

Metal chassis
High shock rating for commercial, industrial or retail applications

Symbol SE1224HP Specifications

Physical Characteristics	
Dimensions:	.75H x 1.51W x 1.38D (in) 19.1H x 38.35W x 35.05D (mm)
Weight:	1.33 oz./37 g
Configuration:	decoded
Interface:	SSI Control over TTL Serial on a 12 pin ZIF connector
User Environment	
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)
Operating Temp.:	-22° to 140°F (-30° to 60°C) chassis temp.
Storage Temp.:	-40° to 158°F (-40° to 70°C)
Humidity:	5% to 95% non-condensing
Power:	SE-1224HP-I000AR: 5VDC ± 10% SE-1224HP-I001AR: 3.3VDC ± 10%
Scan Current:	140 mA typical
Standby Current:	60 uA
Shock:	2,000 G
Regulatory	
Laser Classification:	Intended for use in CDRH /IEC 825 Class II devices
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:	42° (typical), 30° (narrow)
Scan Patterns:	Linear
Minimum Print Contrast:	Minimum 25% absolute dark/light reflectance measured 650 nm
Symbologies:	All major 1D bar codes
Programmable Parameters:	Laser On Time, Aim Duration, Power Mode, Trigger Bi-directional Redundancy, Symbology Types/Lengths, Data Formatting, Serial Parameters, Beeper Tone
Scan Angle:	at 42°
Ranges - 1D codes:	**5 mil:** Code 39; 2.5:1 - 80% MRD: 4.5 - 9.25 (in) / 11.43 - 23.5 (cm) **7.5 mil:** Code 39; 2.5:1 - 80% MRD: 4.25 - 14.75 (in) / 10.79 - 37.47 (cm) **13 mil:** 100% UPC - 80% MRD: 3.25 - 26 (in) / 8.26 - 66.04 MRD: 27 - 115 (in) / 65.58 - 276.86 (cm) **20 mil:** Code 39; 2.2:1 - 80% MRD: 2 - 41.5 (in) / 5.08 - 105.41 (cm) **40 mil:** Code 39; 2.2:1 - 80% MRD: 3.25 - 70.75 (in) / 8.26 - 179.79 (cm) **55 mil:** Code 39; 2.2:1 - 80% MRD: 4.5 - 86 (in) / 11.43 - 228.6 (cm)

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

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