Symbol Bar Code Scanners

With millions installed worldwide, Symbol scan engines from Motorola are unmatched for reliability, performance, durability and size. Our award-winning scan engines are available in two main product groups: the Symbol Scan Engine (SE) Series and the Symbol MiniScan (MS) family.

SYMBOL SE SERIES

The Symbol SE Series delivers powerful scanning and imaging capabilities for any design. This high performance and versatile product line reads linear one-dimensional (1D) or high-density two-dimensional (2D) symbologies including PDF417, Micro PDF, Reduced Space Symbology® (RSS) and Composite codes.

Symbol SE950/955

1D

The Symbol SE950/SE955 raises the bar for miniature scan engines, offering optimum quality, reliability, durability and scanning performance for handheld computers, medical instruments, clinical diagnostics, kiosks, lottery terminals or robotics. Scanning is intuitive and rapid, regardless of environment. The highly advanced retro-collective optical design provides a wide working range from 1 in./2.54 cm to over 4 ft./1.22 m, meeting scanning needs in a wide range of applications. The patented frictionless Liquid Polymer Scan Technology will not wear out. And the elimination of fragile silicon mirrors combines with the die cast chassis to enable the device to handle drop shocks up to 2000Gs, delivering maximum uptime and a lower total cost of ownership for your customers.

Symbol SE1224HP

1D

The Symbol SE1224 High Performance scan engine leverages fuzzy logic for premium scanning performance on poorly printed and low contrast 1D bar codes. This scan engine delivers an excellent working range from contact to beyond 60 in./152 cm. Its wide temperature range, immunity to ambient light and durable design ensure excellent performance in any environment. Slightly larger than one cubic inch, the Symbol SE1224 HP's compact form factor easily integrates into portable and fixed-mount OEM devices.

Symbol SE1223WA

1D

The Symbol SE1223 Wide Angle scan engine features a broad, 53 degree scan angle to accommodate wider bar codes for at- or near-contact scanning in retail, warehouse and fixed-mount applications. Blink mode and intelligent bar code sensing automatically trigger the scan engine for fast, reliable data capture.
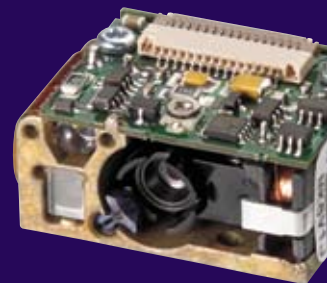
Symbol SE1223LR

1D

The 1.15 cubic inch Symbol SE1223LR offers the wide working range required to support long range scanning applications. The 20 ft./6.1 m range combines with an extra bright scan line to make distance scanning easy and intuitive. And a wide temperature range, high immunity to ambient light and a durable shock resistant design deliver dependable scanning performance — inside and outside.

Symbol SE1524ER

1D

The Symbol 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 Symbol SE1524ER is both durable and reliable to offer premium long-range scanning performance in the toughest environments.

When you choose Motorola, you choose OEM technology that simplifies the integration of core technology into your products.

Symbol SE2223

1D, PDF

This adaptive scan engine packs power and performance into the smallest package available. The high-speed (640 scans per second) smart raster pattern enables rapid reading of 1D and PDF bar codes — even on poorly printed symbols. The highly visible 650 nm laser diode and special "aim" modes make scanning easy and intuitive. The rugged zinc chassis enables the device to endure shocks up to 2000 Gs. Available in standard and high-density configurations, the Symbol SE2223 is ideal for any application where fast, accurate scanning is required — from blood analyzers, ATMs and other automated medical test and processing equipment to a wide variety of applications, including age verification, manufacturing, back room receiving and loyalty cards.

Symbol SE3223

1D, PDF

The Symbol SE3223 is a high-speed omnidirectional scan engine that offers all the features and functionality of the SE2223 with the addition of two different scan patterns for 1D and PDF417 bar codes. This high level of flexibility enables a single engine to meet the needs of a wide variety of OEM products, increasing the efficiency of product design and enabling easy and cost-effective product upgrades. The result is a highly flexible device suitable for any application that requires fast, accurate scanning such as kiosks, ATMs, listening stations, lottery machines, vending machines and more.

Symbol SE4400 with PL4407

1D, PDF, 2D, imaging

The miniature Symbol SE4400 2D Imager Engine is designed for optimal integration into OEM devices. The superior image quality of the VGA charge-coupled device (CCD) enables 360 degree bar code reading in addition to image and signature capture. Its companion decoder, the PL4407, controls camera functions and decodes all 1D and 2D symbologies omnidirectionally. The PL4407 is available as a ball grid array (BGA) component or integrated on a printed circuit board for integration into your design. The Symbol SE4400 is perfect for a growing number of applications such as manufacturing, healthcare, kiosk, security/identification, tape storage, small item identification, parcel sorting, lottery and more.

Symbol SE6700

1D, PDF, 2D, imaging

With the Symbol SE6700, you can create a single flexible device that can provide the functionality of a bar code scanner, document scanner and camera, delivering real value to your customers — fewer devices to purchase and manage translates into reduced capital and operational costs. Two models offer different focal distances, providing a flexible reading range to meet the needs of many applications. The standard model is designed primarily for bar code scanning, while the document capture (DC) model is capable of reading bar codes as well as capturing 8.5 in. x 11 in. and A4-sized images.

Universal Scan Engine Developer Kit (SDK)	This Symbol SDK provides all the software and hardware tools you need to design and test your embedded scan engine application before you begin integration into your host device. The Symbol SSI SDK is a complete package that enables users to benefit from Motorola's Simple Serial Interface (SSI) protocol utilized in all of our decoded OEM engine offerings: SE955, SE1223HP, SE1223WA, SE1223LR, SE1224HP, SE1524ER, SE2223, SE3223, CSE-600 (Positron) and the SE4400 and SE6700 Imager scan engines. The simple serial interface (SSI) provides a cost-effective, highly integrated and flexible protocol for OEMs designing for bar code scanning applications and auto ID markets using a broad range of scan engines. The SSI provides a communications link between Motorola decoded engines (or Symbol MiniScan) and a serial host. The specification for SSI is from the perspective of both the decoder and host. Some products are equipped with USB connectivity and offer Motorola's Native API (SNAPI) protocol for programmability over this 2 way communications port. The SNAPI protocol is available to allow customers easy access to these engine parameters and to enable full control of the device.

FIXED-MOUNT SCANNERS: SYMBOL MINISCAN FAMILY

The Symbol MiniScan family of bar code scanners offer high performance 1D and 2D scanning for virtually any market or application with plug-and-play simplicity — all at an affordable price. These compact devices are ideal for OEM applications such as kiosks, clinical diagnostic equipment, medical devices, lottery devices, data storage equipment and more. When used as a fixed-mount device, they are perfect for conveyor belts, security ID, robotic equipment, library and document tracking, and manufacturing and warehouse applications. Their compact ergonomic packages simplify data capture integrations by providing not only key scanning performance but an assortment of features such as IP54 sealing, integrated beeper, RS-232 and USB interfaces. Just plug them in and you're ready to go. The broad product line will offer a tremendous amount of flexibility and convenience for virtually any data capture market or application. All Symbol MiniScan products can be controlled via serial commands from the host or PC and are flexible, allowing manual trigger inputs from a push button or object sensor.

Symbol MS954	**1D**
	This compact, durable, fixed-mount scanner provides high performance linear scanning on all types of 1D bar codes, including poorly printed and low contrast symbols. One of the smallest, lightest and brightest fixed-mount scanners available today, the Symbol MS954 is ideal for accurate automated data collection in OEM device designs with space constraints, such as kiosks and ATMs, clinical diagnostic equipment, medical instruments, gaming devices and turnstiles/access control. The device offers a configurable scan angle of 47° and 35°, delivering a flexible, expanded working range from near contact to over 35 in./88.9 cm. The device can be controlled by software or manually triggered to enable hands-free or unattended applications. Easy to program and configure, the Symbol MS954 offers plug-and-play installation that reduces development time and enables a rapid time-to-market — without in-house technical resources for scanner integration.

Symbol MS12XXFZY	**1D**
	The Symbol MS12XXFZY incorporates fuzzy logic for premium scanning performance on all types of 1D codes including poorly printed and low contrast. Symbol MS12XXFZY scanners are ideal for embedded applications such as medical instruments, diagnostic equipment, vending machines, gas pumps and more. When used as a fixed-mount scanner, the modules are perfect for manufacturing, warehouse and shipping, conveyor belts, library, document tracking and countless other applications that need reliable, unattended scanning. This product is sealed for those tough environments.

Symbol MS12XXWA	**1D** The Symbol MS12XXWA wide angle scanner features a broad, 60 degree scan angle to accommodate large 1D bar codes within extremely close range. The Symbol MS12XXWA is ideal for high-volume, near contact scanning required in kiosks, ATMs, assembly lines and many warehouse and shipping applications. This product is sealed for those tough environments.
Symbol MS22XX	**1D, PDF** The Symbol MS22XX is an advanced, high-performance, 1D/PDF industrial fixed-mount scanner for high throughput, designed for manufacturing, warehousing and OEM applications. It offers a high-speed, smart raster pattern optimized for 1D/PDF applications. The high-speed, smart raster pattern is optimized for the reading of PDF417 bar codes, reduced space symbology (RSS) and composite codes, as well as damaged and poorly printed 1D codes. This product is ideal for fixed-mount applications that require high-speed scanning, such as conveyor belts, manufacturing and warehouse applications, gas pumps, security/ID verification and any other automated data entry device. This product is sealed for those tough environments.
Symbol MS32XX	**1D, PDF** The Symbol MS32XX is a high-performance, fixed-mount scanner that offers a unique high-speed omnidirectional scan pattern to read bar codes quickly and accurately — minimizing the need for precise positioning of linear 1D bar codes. It provides an easy, cost-effective way to enhance OEM devices with 1D and PDF scanning. The small form factor, combined with high-speed omnidirectional scanning, provides the perfect solution for any application requiring fast, accurate scanning such as kiosks, ATMs, listening stations, point-of-sale and more. This product is sealed for those tough environments.
Symbol MS4400	**1D, PDF, 2D, imaging** One of the smallest charge-coupled device (CCD) imaging products available today, the Symbol MS4400 MiniScan Imager offers maximum diversity in data capture wherever a small footprint is required, with high performance one-dimensional (1D) and two-dimensional (2D) bar code scanning as well as signature and image capture. The Symbol MS4400 delivers a new level of miniaturization, designed to fit in the tightest of spaces — such as a check-in kiosk at an airport gate, point-of-sale (POS) areas with very limited counter space, manufacturing cells where space is at a premium and clinical diagnostic equipment. Built-in features like omnidirectional scanning and an intuitive aiming frame ensure fast, accurate scanning — regardless of whether experienced employees or first-time customers are scanning or capturing images. The dual-focus system provides exceptional depth of field for all bar code densities — from 5 mil to 100 mil — offering the greatest decode range. And built-in illumination ensures that bar codes and images can be accurately captured in any lighting condition — from bright sunlight to total darkness.