

# Symbol MS4400

## MiniScan Imager

FIXED MOUNT SCANNER

### Miniature imager offers comprehensive data capture — and versatility

The flexible and compact Symbol MS4400 MiniScan Imager delivers high performance 1D and 2D bar code and image capture wherever an extremely small footprint is required. One of the smallest charged couple device (CCD) imaging products available today, the Symbol MS4400 is designed to fit in tight spaces — from a check-in kiosk at an airport gate, in point-of-sale (POS) areas with very limited counter space, in manufacturing cells where space is at a premium, in clinical diagnostic equipment, as a standalone device and more. Ready to mount, this small plug-and-play device can be integrated quickly and easily into your existing environment.

### Superior bar code capture and imaging performance

The Symbol MS4400 offers an array of features designed to deliver superior data capture performance. The dual-focus system provides exceptional depth of field for all bar code densities, offering the greatest decode range — and the flexibility required for use in a wide variety of applications. A wide range of bar code densities is supported — from 5 mil to 100 mil — enhancing the ability to capture virtually any bar code. Integrated bar code decoding simplifies integration into your environment by eliminating the need to develop complex decoding algorithms. Built-in illumination ensures that bar codes and images are appropriately lit to enable accurate capture, providing dependable operation in any lighting condition — from bright sunlight to total darkness. And when used in presentation mode, the Symbol MS4400 is quiet and unobtrusive, activated only when movement is detected.

### Easy to use

The Symbol MS4400 offers features that make bar code capture easy, regardless of the user — your employees or customers at self-service kiosks. The omni-directional scan pattern eliminates the need to position items precisely. The clear aiming frame enables users to visually see the area that is to be captured, ensuring first time every time accurate capture. And an audible tone and visible LED light, programmable via two-way host communications, let users know that the data capture is accurate — and complete.

### 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. And since even the most intelligent products require a maintenance plan and a support strategy, we offer superior services to help you maximize uptime and maintain peak performance.

For more information about the Symbol MS4400 MiniScan Imager, contact us at +1.800.722.6234 or +1.631.738.2400, or visit us on the Web at: [www.symbol.com/MS4400](http://www.symbol.com/MS4400)



#### FEATURES

#### BENEFITS

Compact size	Enables bar code and image capture in tight spaces like kiosks, countertops and clinical diagnostic equipment
Easy to mount	Rapid integration into your environment
1D and 2D bar code reading	Provides versatility to read bar codes in a wide range of environments — from prescription drugs to drivers licenses; reduces expenses with the flexibility to support multiple applications
Omni-directional capture pattern	Minimizes need to position bar codes; ensures rapid, accurate data capture
Features exit window, LED illumination, integrated beeper and common interfaces	Plug and play installation for reduced development time and integration costs
Intuitive aiming feature	Projects a framed aiming pattern to enable users to visually see area to be captured for highly accurate aim
Built-in LED illumination	Flexibility to adapt to any lighting environment, from total darkness to bright sunlight
Smart dual-focus system	Offers the greatest decode range for maximum application flexibility
Symbol MS4404: Simple Serial Interface (SSI) Symbol MS4407: SNAP! over USB	Reduces integration time and cost



# Symbol MS4400 Specification Highlights

## Physical Characteristics

Dimensions:	0.99 in. H x 1.91 in. W x 2.18 in. D 25.14 mm L x 48.51 mm W x 55.37 mm D
Weight:	1.8 oz./51.03 g
Interfaces:	9-pin male D-sub supports all interfaces

## Performance Characteristics

Field of View:	Horizontal: 33.2 degrees; Vertical: 24.5 degrees
Optical Resolution (gray scale):	640 (H) x 480 (V) pixels
Roll:	360°
Pitch Angle:	+/- 60° from normal
Skew Tolerance:	+/- 50° from normal
Focal Distance from Front of Window:	Near: 5 in./127mm Far: 9 in./229mm
Aiming Element (VLD):	650 nm +/- 5 nm
Illumination Element (LEDs):	635 nm +/- 20 nm
Interface:	MS4404: True RS-232; MS4407: 0-5 V Serial (TTL) and USB Full Speed
Symbologies:	1-D Symbology: UPC/EAN, Code 128, UCC/EAN128, RSS, Code 39, Code 93, I 2 of 5, Discrete 2 of 5, Codebar, MSI 2-D Symbology: MaxiCode, PDF417, DataMatrix, QRCode Postal Codes: U.S. Postnet, U.S. Planet, UL Postal, Japan Postal
Image File Formats:	BMP, TIFF, JPG
Programmable Patterns:	Power Mode, Trigger Mode, Beeper Tone, Session Time, Focus Control, Camera Control, Image Control

## User Environment

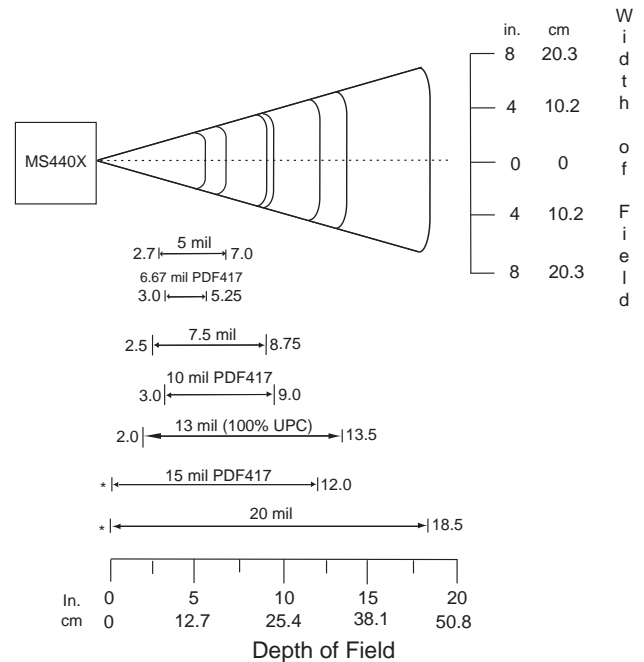
Ambient Light:	Total darkness to 9000 ft. candles (96,900 LUX)
Operating Temperature:	-4° to 122° F/-20° to 50° C
Storage Temperature:	-40° to 158° F/-40° to 70° C
Humidity:	5% to 95% noncondensing at 40° C (operating) 5% to 85% noncondensing at 70° C (storage)
Drop:	Unit will withstand multiple 30 in./76cm drops to concrete
Power:	MS4404: Input Voltage: 4.5 to 13.2 VDC Input Current: 260 mA typical MS4407: Input Voltage: 4.5 to 5.4 VDC Input Current: 245 mA typical

## Regulatory

Laser Classification	Intended for use in CDRH Class II/IEC 825 Class 1 devices (aiming device):
Electrical Safety:	ETL, VDE, CETL, EN60950, Ctick, VCCI
EMI/RFI:	FCC Part 15 Class B, ICES-003 Class B, CISPIR22 Class B
Environmental:	ROHS-compliant

Specifications are subject to change without notice.

Note: Typical performance at 73°F (23°C) on high quality symbols in normal room light. Vcc = 5.0Vdc



\* Minimum distance determined by symbol length and scan angle.

## About Motorola

Motorola is known around the world for innovation and leadership in wireless and broadband communications. Inspired by our vision of Seamless Mobility, the people of Motorola are committed to helping you get and stay connected simply and seamlessly to the people, information, and entertainment that you want and need. We do this by designing and delivering "must have" products, "must do" experiences and powerful networks — along with a full complement of support services. A Fortune 100 company with global presence and impact, Motorola had sales of US \$35.3 billion in 2005. For more information about our company, our people and our innovations, please visit <http://www.Motorola.com>



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