Symbol MiniScan MS32XX Series

Plug-and-play module for fast, easy self-scanning integration

The Symbol MS32XX is a member of the MiniScan family of fixed mount scanners specifically designed for kiosks as well as other standalone and OEM applications. The Symbol MS32XX high performance scan module delivers speedy plug-and-play installation in your OEM device — even if you don't have the in-house technical resources for scanner integration. The omni-directional scan pattern minimizes the need for precise positioning of 1D symbols and helps you create intuitive self-scanning applications.

In industries like retail and hospitality, the Symbol MS32XX makes it easier for you to enrich your high-traffic kiosks with customer-centric, self-scanning applications. Some examples include:

Environment:	Applications:
Department and convenience stores; Supermarkets; Warehouse clubs	Kiosks, gift registry, listening stations, loyalty/incentive programs, customer service and price verification.
Airports and Hospitality	ATMs and self check-in/check-out

How to create the ideal self-scanning applications faster

All of the robust features in the Symbol MS32XX are easy to program and configure, enabling you to cut your development time and bring your product to market faster. With a rugged durable housing, exit window, integrated beeper and interface options, the Symbol MS32XX enables your project teams to quickly and confidently integrate high-performance 1D and 2D bar code data capture into many self-scanning applications. The Symbol MS32XX delivers a high-speed omni-directional scan pattern that minimizes the need to position 1D bar codes resulting in quick, accurate scanning by any user — novice or expert.

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 MS32XX, contact us at +1.800.722.6234 or +1.631.738.2400, or visit us on the Web at **www.symbol.com/ms32xx**
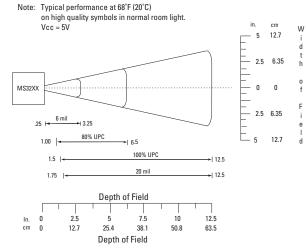
FEATURES	BENEFITS
Compact size	Multiple mounting and interface options provide significant flexibility in the design of your kiosk
High speed omni-directional scan pattern	Build your device with the confidence that even novice users can scan items quickly and accurately
Generates four different scan patterns: omni-directional, semi-omni-directional, raster and single line scan patterns	Enables you to select the best scan pattern for your application
Rugged, durable housing with exit window, integrated beeper, LEDs, decoder and a variety of interfaces including RS-232, USB and Synapse	Gives you plug-and-play installation to reduce your development time and speed your time to market
Sealed to IP54 standards; protects against water and dust	Ensures reliable performance in rough conditions
Reads 1D and 2D symbols including PDF417, MicroPDF, Reduced Space Symbology®	Versatile bar code data capture in any environment
Retrocollective optical system provides high ambient light immunity	Bright scan pattern ensures visibility and ease of use improving productivity at the point of activity
Easy-to-program simple serial interface (SSI)	Provides quick and easy interface (SSI) communication with advanced features and functionality between scanner and host

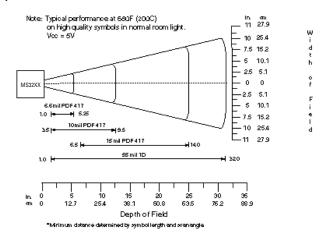**MOTOROLA**

Symbol MS32XX Specification Highlights

Physical Characteristics

Dimensions (maximum):	1.98" H x 2.41" W x 3.60" L
Weight:	4.97 oz /140.89 gm

Performance Characteristics

Light Source:	Visible laser diode 650 nm
Scan Rate:	640 scans/sec (nominal)

Scan Angle:
  Horizontal:
  Vertical:
	
	Cyclone 34°; Raster 34°
	Cyclone 34°; Raster 12.5°

Scan Patterns:	Linear, smart raster and omni-directional
Minimum Print Contrast:	35% absolute dark/light reflectance differential (PDF) 35% absolute dark/light reflectance differential (1D)
Symbologies:	PDF417, MicroPDF, UPC/EAN, Code 39, I 2of 5, Code 128, Codabar, MSI Plessey, RSS and Composite Codes
Programmable Parameters:	Laser On Time, Aim Duration, Power Mode, Trigger Mode, Bidirectional Redundancy, Symbology types/lengths, Data formatting, Serial Parameters, Beeper Tone, Scan Angle, Pattern Controls
Interfaces:	MS3204: RS232 MS3207: TTL RS232, USB, Synapse

User Environment

Ambient Light:	Artificial: 450 ft. candles (4,844 LUX) Sunlight: 8000 ft. candles (86,112 LUX) with correct enclosure
Operating Temperature:	-22° to 122° F /-30° to 50° C
Storage Temperature:	-40° to 158° F /-40° to 70° C
Environmental Sealing:	IP54
Humidity:	5% to 95% noncondensing
Power:	MS3204: Input Voltage: 5.0 VDC ± 10% Input Current: 250 mA typical Standby Current: 25 +/- 5mA MS3207: Input Voltage: ±5.0 VDC ± 10% Input Current: 250 mA typical Standby Current: 45 +/- 5mA
Drop Specification:	Unit functions normally after multiple 30 in./76 cm drops to concrete

Regulatory

Laser Classification:	CDRH Class II, IEC Class 2
Electrical Safety:	Certified to UL1950, CA C22-2 NO950 ENG60950/IEC950
EMI/RFI:	FCC Part 15 Class B, ICES-003 Class B European Union EMC Directive, Australian SMA
Environmental:	ROHS-compliant

Symbol MS32XX 1D Decode Zone

Note: Typical performance at 68°F (20°C) on high quality symbols in normal room light. Vcc = 5V

* Minimum distance determined by symbol length and scan angle.

Symbol MS32XX 2D Decode Zone

Note: Typical performance at 68°F (20°C) on high quality symbols in normal room light. Vcc = 5V

*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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