

# Vision System 4000 Series



## HAND-HELD IMAGERS

### Image Scanning with Best-in-Class Performance

Symbol combines integrated image capture with hand-held scanning of all major bar code symbologies in the Vision System (VS) 4000 Series.

Based on the ergonomic design of the LS 4000 Series of hand-held scanners, the VS 4000 combines best-in-class performance with award-winning ergonomics.

For existing 1-D applications, the VS 4000 provides robust working range on 1-D codes, such as 13 in./33 cm on 100% UPC, with the added benefit of omni-directional scanning. More importantly, the VS 4000 delivers functionality to support the growing number of 2-D applications.

### PDF417, DataMatrix, MaxiCode and Postal Code

Whether your requirements are to read DataMatrix for small item identification, MaxiCode for parcel sortation, postal codes for mail-handling applications, or PDF417 across a variety of applications, the VS 4000 provides the aggressive performance you need.

The VS 4000 High Density version was designed to read DataMatrix codes as small as 0.005 in. (5 mil), while providing a user-friendly working range on all other symbologies.

### Image Capture

For image capture applications, the VS 4000 delivers clear Video Graphics Array (VGA) resolution images while providing the user total control over image attributes such as compression quality, transfer time, and file size. User-selectable imaging options also allow the choice of a variety of industry-standard image file types.

### Comfortable and Intuitive to Use

The VS 4000 is ergonomically contoured, light and easy to use—just what you have come to expect from Symbol! A bright laser generated pattern defines the imager's field of view, enabling point-and-shoot operation for bar code applications and intuitive aiming for image capture applications.

### Easy to Program

With an eye to the future, the VS 4000 is as easy to program as it is to use. With flash programming capability, Symbol made it a snap to update and reconfigure the imager, even in the field. This protects your technology investment and provides an easy upgrade path for new codes and features.



Features	Benefits
Omni-directional reading of matrix codes, PDF417, postal codes and linear symbols	Outstanding image capture for popular, industry-wide applications
Clear VGA resolution	Total control of image attributes
JPEG, TIFF and BMP	Choice of standard image file formats
Ergonomic, two-finger design is intuitive to use	Minimizes operator training
Advanced Data Formatting	Seamless integration into existing host applications
Flash memory	Easy software upgrades in the field
Synapse "Smart Cable" interface	Offers connectivity to any host with a single cable change

The VS 4000 Hand-Held Imager from Symbol Technologies—the right solution for all your hand-held image capture needs.

### For More Information

Symbol is the worldwide leader in bar code-driven data management systems with more than 20,000 wireless network installations and millions of scanners and terminals in use. To find out how the VS 4000 can be used in your application, call any of our convenient locations on the back panel, or visit us at [www.symbol.com/barcode](http://www.symbol.com/barcode)

# VS 4000 Specification Highlights

Physical Characteristics	
Dimensions:	6.3 in. H x 5 in. L x 2.8 in. W/16 cm H x 12.7 cm L x 7.1 cm W
Weight:	7.3 oz./205 gm (without cable)
Coil Cable Length:	6 ft./1.8 m
Performance Characteristics	
Field of View:	32° horizontal/24° vertical
Focal Point:	Standard: 5.8 in./14.8 cm from nose of scanner High Density: 2.4 in./6.2 cm from nose of scanner
Sensor:	Progressive Scan CCD
Optical Resolution:	640 x 480 pixels x 256 shades of gray
Pitch:	+/- 60° (from front to back)
Skew:	+/- 60° from plane parallel to symbol (side-to-side)
Rotational Tolerance:	+/- 180°
Print Contrast Resolution:	25% (1-D symbologies) or 35% (PDF417) absolute dark/light reflectance differential, measured at 650 nm
Aiming Pattern:	Visible laser diode at 650 nm
Ambient Light Immunity:	Sunlight: Up to 9,000 ft.-candles/96,890 lux
Shock:	Withstands multiple 4 ft./1.2 m drops to concrete
Power Requirements:	+4.75 to 5.25V, 400mA (typical) Low Power Mode Current: 1.5 mA Normal Current: 400 mA Peak Current: 930 mA
Interfaces:	RS-232 and Synapse Smart Cable interface
Humidity:	5% to 70% noncondensing
User Environment	
Operating Temperature:	0° to 40° C/32° to 104° F
Storage Temperature:	-20° to 60° C/-4° to 140° F
Decode Capability:	1-D Symbology: UPC-A, UPC-E, EAN-8, EAN-13, Code 39, Code 39 Full ASCII, Trioptic Code 39, Code 93, UCC/EAN-128, Code 128, Codabar, Interleaved 2 of 5, Discrete 2 of 5, Bookland EAN, UPC Coupon Code, MSI Plessey, JAN, Italian Pharmacode 2-D Symbology: MaxiCode, QR Code, micro PDF417, PDF417, DataMatrix (ECC 200) Postal Codes: U.S., Australia, Canada, UK, Japan, Holland
Imaging Options (User Selectable):	File Formats: JPEG, TIFF, BMP Resolution: Full (640x480), 1/2, 1/3, 1/4 image Grayscale Level: 256, 16, 2, shades of gray Cropping: Any rectangular region of the image

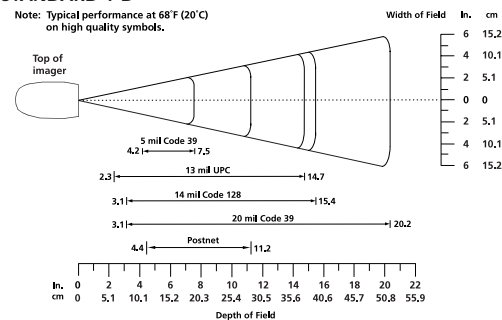
Regulatory	
Electrical Safety:	Certified to UL1950, CSA C22.2 No. 950, EN60950/IEC950
Laser Safety:	CDRH Class II, IEC Class 2
EMI/RFI:	FCC Part 15 Class B, ICES-003 Class B, European Union EMC Directive, Australian SMA

**EN410 CE**



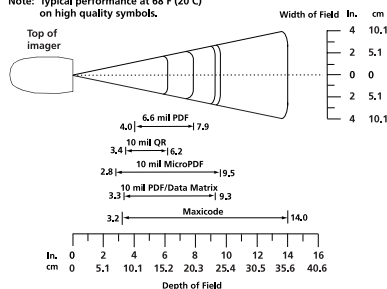
## STANDARD 1-D

Note: Typical performance at 68°F (20°C) on high quality symbols.



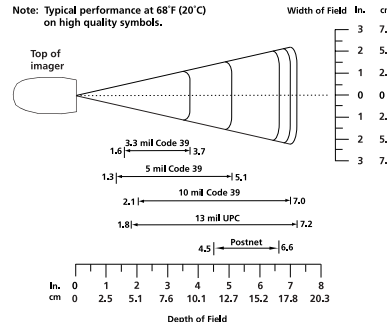
## STANDARD 2-D

Note: Typical performance at 68°F (20°C) on high quality symbols.



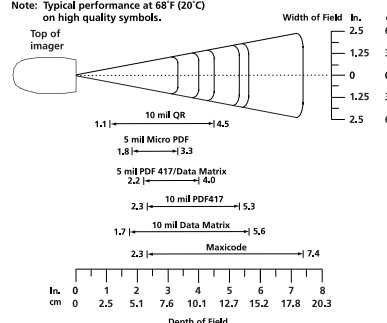
## HIGH DENSITY 1-D

Note: Typical performance at 68°F (20°C) on high quality symbols.



## HIGH DENSITY 2-D

Note: Typical performance at 68°F (20°C) on high quality symbols.



Specifications are subject to change without notice.

All product and company names are trademarks, service marks or registered trademarks of their respective owners.

For system, product or services availability and specific information within your country, please contact your local Symbol Technologies office or Business Partner.



**Corporate Headquarters**  
**Symbol Technologies, Inc.**  
 One Symbol Plaza, Holtville, NY 11742-1300  
 TEL: 1-800-722-6234/1-631-738-2400  
 FAX: 1-631-738-5990

**For Asia Pacific Area**  
**Symbol Technologies Asia, Inc.**  
 (Singapore Branch)  
 Asia Pacific Division  
 230 Victoria Street #04-05  
 Bugis Junction Office Tower  
 Singapore 188024  
 TEL: 65-337-6588  
 FAX: 65-337-6488

**For Europe, Middle East and Africa**  
**Symbol Technologies**  
 EMEA Division  
 Symbol Place, Winnersh Triangle  
 Berkshire, England RG41 5TP  
 TEL: 44-118-9457000  
 FAX: 44-118-9457500

**For North America, Latin America and Canada**  
**Symbol Technologies**  
 The Americas  
 One Symbol Plaza  
 Holtville, NY 11742-1300  
 TEL: 1-800-722-6234/1-631-738-2400  
 FAX: 1-631-738-5990

**Symbol World Wide Web Internet Site**  
 For a complete list of Symbol subsidiaries and Business Partners worldwide contact us at:  
<http://www.symbol.com>  
 E-mail: [webmaster@symbol.com](mailto:webmaster@symbol.com)



Part No. KH Printed in USA 10/01 ©2001 Symbol Technologies, Inc.  
 Symbol is an ISO 9001 and ISO 9002 UKAS, RVC, and RAB Registered company, as scope definitions apply.

