



# Vision System 4000 Series Hand-Held Imagers

## Image Scanning with Best-in-Class Performance

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

### Image Capture

For image capture applications, the VS 4000 delivers clear 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 upgrade path for new codes and features, such as the emerging UCC/EAN Reduced Space Symbologies and Composites.

The VS 4000 Hand-Held Imager from Symbol Technologies —

the right solution for all your hand-held image capture needs.

### Features

- ▶ Reads popular matrix codes, PDF417, postal codes, and linear symbols
- ▶ Omni-directional reading on all symbologies
- ▶ Unrivalled working ranges on high density codes
- ▶ Captures clear VGA resolution images with fast file transfer
- ▶ JPEG, TIFF and BMP file formats are user selectable
- ▶ Distinctive, easy-to-use laser aiming pattern for intuitive operation
- ▶ Award winning ergonomics with patented two-finger trigger
- ▶ Advanced Data Formatting and parameter programming capabilities
- ▶ Flash memory for easy software upgrades in the field
- ▶ Synapse Smart Cable interface

### For More Information

Symbol is the worldwide leader in bar code-driven data management systems with more than 20,000 wireless network installations and over 5 million 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](http://www.symbol.com)

Symbol introduces the Vision System 4000 Series of hand-held imagers for reading all major bar code symbologies with the added capability of image capture. 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 1D applications, the VS 4000 provides robust working range on 1D codes, such as 13 in./33cm on 100% UPC, with the added benefit of omnidirectional scanning. More importantly, the VS 4000 delivers functionality to support the growing number of 2D applications.

### PDF417, Datamatrix, MaxiCode and Postal Code

Whether your requirement is 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.

# VS 4000 Specification Highlights

## Physical Characteristics

|                    |  |
|--------------------|--|
| Dimensions:        | 6.3in/16 cm H x 5 in./12.7 cm L x 2.8 in./7.1 cm W |
| Weight:            | 7.3 oz/205 gm (without cable)                      |
| Coil Cable Length: | 6ft/1.8m   |

## Performance Characteristics

|                            |  |
|----------------------------|--|
| Field of View:             | 32° horizontal/24° vertical  |
| Focal Point:               | Standard: 7 in/17.8 cm from nose of scanner<br>High Density: 3 in/7.6 cm from nose of scanner                        |
| Sensor:                    | Progressive Scan CCD   |
| Optical Resolution:        | 640x480 pixels x 256 shades of gray  |
| Pitch:                     | +/- 60° (from front to back)   |
| Skew:                      | +/- 50° from plane parallel to symbol (side-to-side)   |
| Rotational Tolerance:      | +/- 180°   |
| Print Contrast Resolution: | 25% (1D 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 9,000ft-candles/96,890 lux   |
| Humidity:                  | 5-70% non-condensing   |
| Shock:                     | Withstands multiple 4ft/1.2m drops to concrete   |
| Power Requirements:        | +4.75 to 5.25V, 400 mA (typical)<br>Low Power Mode Current: 1.5 ma<br>Normal Current: 400 ma<br>Peak Current: 850 ma |
| Interfaces:                | RS-232, Synapse Smart Cable interface, and Symbol Simple Serial Interface (SSI)                                      |

## User Environment

|                                    |   |
|------------------------------------|---|
| Operating Temperature:             | 0° to 40° C/32° to 104° F   |
| Storage Temperature:               | 20° to 60° C/-4° to 140° F  |
| Decode Capability:                 | 1D Symbology: UPC-A, UPC-E, UPC-E1, EAN-8, EAN-13, Code 39, Code 39 Full ASCII, Trioptic Code 39, Code 93, UCC/EAN, ISBT 128, Code 128, Codabar, Interleaved 2 of 5, Discrete 2 of 5, Bookland EAN, UPC Coupon Code, MSI Plessey.<br>2D Symbology: MaxiCode, PDF417, DataMatrix (ECC 200)<br>Postal Codes: U.S., Canada, UK, Japan, Holland |
| Imaging Options (User Selectable): | File Formats: JPEG, TIFF, BMP<br>Resolution: Full (640x480), 1/2, 1/3, 1/4 image<br>Grayscale Level: 256, 16, 2, shades of gray<br>Cropping: Any rectangular region of the image  |

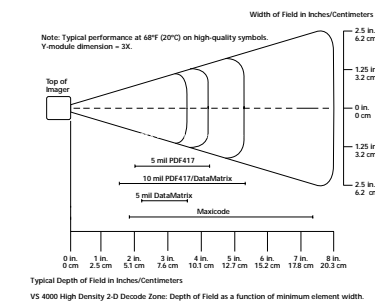
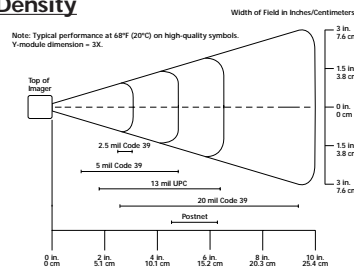
## Regulatory

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

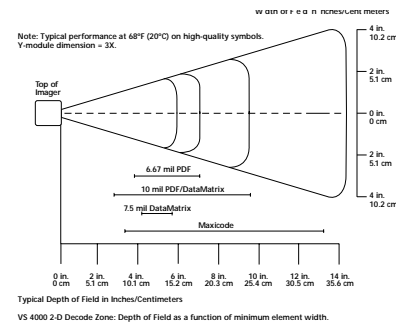
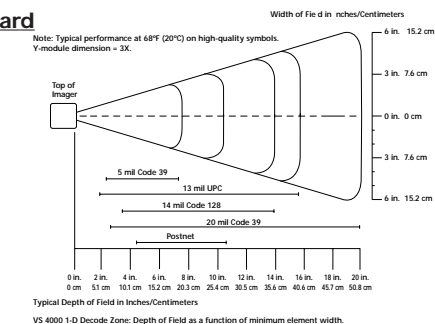
**EN410**



## High Density



## Standard



Specifications subject to change without notice.

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



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