# 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 $13 \mathrm{in} . / 33 \mathrm{~cm}$ 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 upgrade

| Features | Benefits |
| :--- | :--- |
| Omni-directional reading of <br> matrix codes, PDF417, postal <br> codes and linear symbols | Outstanding image capture <br> for popular, industry-wide <br> applications |
| Clear VGA resolution | Total control of image attributes |
| JPEG, TIFF and BMP | Choice of standard image file <br> formats |
| Ergonomic, two-finger design <br> is intuitive to use | Minimizes operator training |
| Advanced Data Formatting | Seamless integration into <br> existing host applications |
| Flash memory | Easy software upgrades in the field |

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.

## 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

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: | $7.3 \mathrm{oz} . / 205 \mathrm{gm}$ (without cable) |
| Coil Cable Length: | 6 ft ./ 1.8 m |
| Performance Characteristics |  |
| Field of View: | $32^{\circ}$ horizontal $/ 24^{\circ}$ vertical |
| Focal Point: | Standard: 5.8 in ./ 14.8 cm from nose of scanner High Density: $2.4 \mathrm{in} . / 6.2 \mathrm{~cm}$ from nose of scanner |
| Sensor: | Progressive Scan CCD |
| Optical Resolution: | $640 \times 480$ pixels $\times 256$ shades of gray |
| Pitch: | +/-60 ${ }^{\circ}$ (from front to back) |
| Skew: | $+/-60^{\circ}$ from plane parallel to symbol (side-to-side) |
| Rotational Tolerance: | +/-180 ${ }^{\circ}$ |
| 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 $5.25 \mathrm{~V}, 400 \mathrm{~mA}$ (typical) <br> Low Power Mode Current: 1.5 mA <br> Normal Current: $\mathbf{4 0 0} \mathrm{mA}$ <br> Peak Current: 930 mA |
| Interfaces: | RS-232 and Synapse Smart Cable interface |
| Humidity: | 5\% to 70\% noncondensing |
| User Environment |  |
| Operating Temperature: | $0^{\circ}$ to $40^{\circ} \mathrm{C} / 32^{\circ}$ to $104^{\circ} \mathrm{F}$ |
| Storage Temperature: | $-20^{\circ}$ to $60^{\circ} \mathrm{C} /-4^{\circ}$ to $140^{\circ} \mathrm{F}$ |
| 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 <br> 2-D Symbology: MaxiCode, QR Code, micro PDF417, PDF417, DataMatrix (ECC 200) <br> Postal Codes: U.S., Australia, Canada, UK, Japan, Holland |
| Imaging Options (User Selectable): | File Formats: JPEG, TIFF, BMP <br> Resolution: Full ( $640 \times 480$ ), $1 / 2,1 / 3,1 / 4$ 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, IEC Class 2 |
| EMI/RFI: | FCC Part 15 Class B, ICES-003 Class B, European Union EMC Directive, Australian SMA |
|  | - N410 ( |

STANDARD 1-D


## STANDARD 2-D



HIGH DENSITY 1-D


HIGH DENSITY 2-D


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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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