# INTEGRA 9580

# INFORMATION BOOKLET

LVS®

THE LEADING PROVIDER OF
PRINT QUALITY INSPECTION SYSTEMS

LVS® IS AN ISO 9001:2008 REGISTERED COMPANY

EFFECTIVE: 10-APRIL-2014
SUPERSEDES: 29-AUG-2013

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**IMPORTANT**

- While all information contained in this document is believed to be accurate and complete, the continual improvements of LVS® products may cause information in this document to become outdated. Please contact LVS® or your distributor if you have product questions or to verify you have the most current version of the document.
- The information in this guide is for informational purposes only. It is not intended for use as an Operations Manual.



**How to Contact Us**

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| | |
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# PRODUCT DESCRIPTION

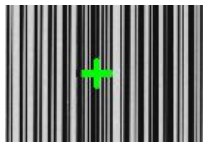
The INTEGRA 9580 is a high performance handheld solution for off-line bar code verification to ISO/IEC standards. Featuring a high resolution 5.0 megapixel camera, the INTEGRA 9580 reads and analyzes linear (1D) and two-dimensional (2D) codes up to 3.0 inches (76.19 mm) wide and up to 2.25 inches (57.15 mm) tall.

The INTEGRA 9580 verifies multiple bar code types, including any combination of Linear, Matrix (Data Matrix, QR Code, and Aztec Code), and Stacked Linear (PDF 417, Micro PDF and Composite Codes).

Powered by a 10-foot (3048 mm) USB 2.0 cable, the INTEGRA 9580 verifies bar code labels located on a wide range of surfaces including corrugated cardboard boxes, shipping containers, and on a static (non-moving) web.

To use the INTEGRA 9580 verifier:

1. Firmly grip the INTEGRA 9580 handle and press the trigger.
2. Place the verifier window over the bar code ensuring the four rubber feet surrounding the window rest on the substrate (media/label material). The rubber feet hold the substrate in place and minimize movement of the substrate.
3. The bar code image appears on the customer-supplied computer with a green plus symbol (+) located on the bar code image.
4. Center the green plus symbol over the center of the bar code image and release the trigger.



5. The INTEGRA 9580 software measures the quality of the bar code and reports a grade score between 4.0 (A grade) and 0.0 (F grade) or “Pass” / “Fail.”

## Additional Features

- **21 CFR Part 11 Compliant-Ready**
- **Inspection.** Inspects all nine of the ISO (ANSI) parameters in linear (1D) codes, plus added features of determining blemishes and human readable validation. The INTEGRA 9580 also verifies 2D codes (including Multi-row and Matrix codes) and reports all parameters as specified in the applicable symbology specification.
- **Detailed Analysis.** Analysis is color coded to show exactly where the problem is located within the bar code, and sections of the bar code can be analyzed to determine how to solve the problem.
- **High-Resolution Inspection.** High-resolution inspection of the bar code is possible due to the use of a 5.0 megapixel high resolution camera, which allows reading and analyzing every two thousandth of an inch (.002"/.05 mm) of the bar code height; this exceeds the minimum ten-scan average required by ISO.
- **Advanced Technology.** Sensor technology allows more detailed analysis of the bar code, and makes reading of small and truncated codes possible, accurate and easy.
- **EAN/UPC NIST Traceable Calibrated Conformance Standard Test Card.** The INTEGRA 9580 is supplied with a NIST traceable calibrated conformance standard test card provided by GS1 to ensure that the system is always within a known calibration standard.
- **Simple installation steps.** Installation of the INTEGRA 9580 consists of two easy steps:
    - Install the INTEGRA 95XX Series software (located on the Installation CD supplied with your system) on a customer-supplied computer. Onscreen instructions guide you through each step of the installation process. The “INTEGRA 95XX Series Software Installation Guide” is also provided, ensuring the installation process is as simple as possible.
    - Connect the supplied USB cable from the USB port on the computer to the USB port on INTEGRA 9580 handle. The INTEGRA 9580 is ready for use.

## Hardware Features


*Photo subject to change*







Effective: 10-April-2014
Supersedes: 29-Aug-2013

# SPECIFICATIONS

## Physical Properties

| | | |
|---|---|---|
| Height | 8.5” | 215.9 mm |
| Width | 4.75” | 120.6 mm |
| Depth | 5.5” | 139.7 mm |
| Weight | ▪ Unpackaged Weight = 15.5 oz (.44 kg)<br>▪ Shipping weight (includes all items packaged in shipping box, such as cables, manuals, etc.) = Approx 4 pounds (1.81 kg) | |


## Imaging Device

- 5.0 megapixel camera
- Object Distance: Contact

## Field of View

- 3.0” (76.19 mm) horizontally
- 2.25” (57.15 mm) vertically

## Minimum Bar Code X Dimension

- 1D = 4.0 mils (0.10 mm)
- 2D = 5.9 mils (0.15 mm)

## Minimum PC Requirements (PC Supplied by Customer)

- Windows® XP Professional or Windows® 7 (Windows® Vista is not supported)
- Intel® Core™ 2 Duo Processor (or equivalent)
- 2 GB RAM
- 800 x 600 Resolution
- One available USB 2.0 port

## Power Requirements

- USB Powered 5VDC @ 180mA

## Light Source

- Red 660 nm filter

## Communication

- USB 2.0 A/MINI-B cable 10 feet (3048 mm)

## Operating and Storage Temperature

- 4º C (40º F) to 46º C (115º F)

## Relative Humidity

- 5% to 95% (non-condensing)

## Calibration

- EAN/UPC Calibrated Conformance Test Card (LVS® part # CAL002)

## Safety Compliant

- RoHS/WEEE compliant
- CE

*Specifications and photos subject to change without notice*

# SYSTEM CONFIGURATIONS

Three INTEGRA 9580 configurations are available for purchase. Each configuration is priced separately. Contact LVS® for pricing details.

## OPTION 1 — 1D Bar Code Verification

- Verifies linear (1D) bar code labels only. *Two-Dimensional (2D) bar codes labels are not verified.*
- LVS® Part Number: 9580-1D-3-0

## OPTION 2 — 1D and 2D Bar Code Verification

- Verifies linear (1D) and two-dimensional (2D) bar code labels.
- LVS® Part Number: 9580-C-3-0

## OPTION 3 — Upgrade Option

- This is an upgrade option designed for users who have linear (1D) bar code verification only and wish to add two-dimensional (2D) bar code verification capability.
- LVS® Part Number: SOF0069

### Items Included with Purchase

- INTEGRA 9580 Bar Code Verifier
- USB 2.0 A/MINI-B cable - 10 feet (3048 mm)
- EAN/UPC NIST traceable Calibrated Conformance Test Card used for calibrating the INTEGRA 9580. The test card is provided by GS1 to ensure the INTEGRA 9580 is always within a known calibration standard
- Installation CD (includes INTEGRA 95XX software and "INTEGRA 95XX Series Bar Code Quality Station Operations Manual")
- "INTEGRA 95XX Series Software Installation Guide"

**Note**: The INTEGRA 9580 connects to a customer-supplied computer. See "Specifications" section for minimum computer requirements.

# SUPPORTED SYMBOLOGIES

Below are a few of the linear (1D) and two-dimensional (2D) symbologies supported by the INTEGRA 9580. Contact LVS® for a full list of supported symbologies.

## 1D Codes

- Aztec Code
- Codabar
- Code 128
- Code 39
- Code 93
- DataBar expanded
- DataBar limited
- DataBar omindirectional
- DataBar stacked
- DataBar truncated
- DataBar
- EAN/JAN-13
- EAN/JAN-8
- Enterprise Intelligent Barcode (EIB) 4State (4SB)
- French CIP
- GS1-128
- Hanxin Code
- HIBC
- Interleaved 2 of 5 (ITF)
- ITF-14
- Japan Post
- MaxiCode
- MSI Plessey
- Pharmacode – Italian
- Pharmacode - Laetus
- PZN 7 and PZN 8
- UPC-A
- UPC-E
- USPS-128
- USPS Intelligent Mail Barcode (also referred to as 4-State Barcode)

## 2D Codes

Listed below are 2D codes (including 2D Composite Components abbreviated as CC) available for use with the “1D and 2D Barcode Verification” option (Option 2 listed on page 8).

- DataBar with CC-A, CC-B, or CC-C
- EAN/JAN-13 with CC-A, CC-B, or CC-C
- EAN/JAN-8 with CC-A, CC-B, or CC-C
- ECC-200 (Data Matrix)
- Enterprise Intelligent Barcode (EIB) Complex Mail Data Marks (CMDM)
- GS1-128 with CC-A, CC-B, or CC-C
- Micro QR Code
- MicroPDF417
- PDF417
- QR Code
- UPC-A with CC-A, CC-B, or CC-C
- UPC-E with CC-A, CC-B, or CC-C

# SUPPORTED STANDARDS

Below are a few of the standards supported by the INTEGRA 9580. Contact LVS® for a full list of supported standards.

## ISO CONFORMANCE STANDARDS

ISO/IEC 15415

ISO/IEC 15416

ISO/IEC 15426-1

ISO/IEC 15426-2

## GS1 US CERTIFICATION

Data Matrix for Healthcare

Data Matrix (ECC 200)

EAN/UPC

EAN/UPC and extended codes

EAN/UPC with CC

GS1 DataBar Omnidirectional

ITF-14

GS1 Databar-14 with CC (formerly RSS-14 with CC)

UCC/EAN with Supplementals

UCC/EAN-128

UCC/EAN-128 with CC

## APPLICATION STANDARDS

AIAG/DAMA/JAPIA/Odette

ALDI

AS9132-A /AIM DPM Cat 0

DHL

FPMAJ

GS1 General Specifications

HDMA Guidelines

Health Industry Bar Code (HIBC)

IFAH

ISO/IEC 15415/15416

Italian Pharmacode

Japan Codabar

Laetus Miniature Pharmacode

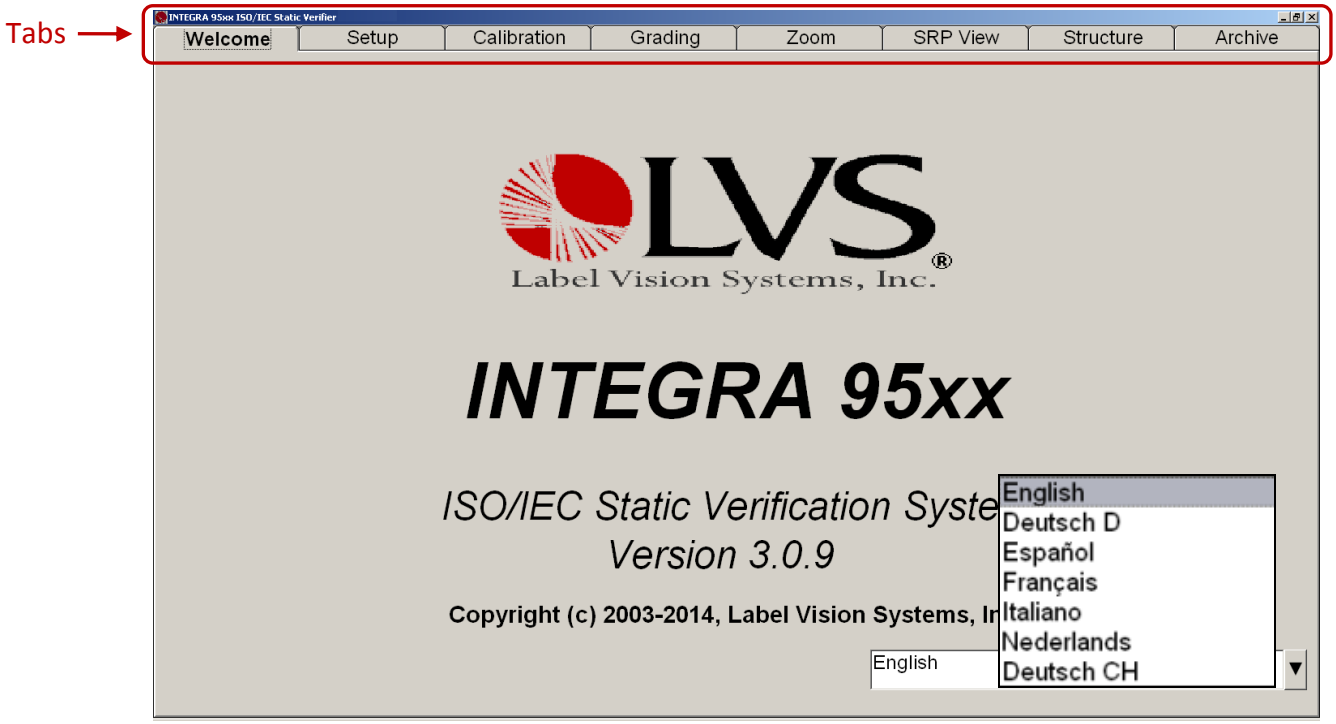
Laetus Pharmacode

Laetus Standard

MIL-STD-130

# SOFTWARE OVERVIEW

The INTEGRA 9580 software is comprised of tabs located across the top of the screen, each designed to perform a specific function. Refer to the following sections for more information on each tab.




## WELCOME TAB

The **Welcome** tab is the first tab to appear when logging onto the INTEGRA 9580. This tab provides the version number and allows the user to select the desired software language. The INTEGRA 9580 currently supports 14 languages.

## SETUP TAB

The **Setup** tab is where system settings are defined, such as:

- The preferred method of grading bar codes (automatic, manual or auto-sector)
- Application Standards
- Operator names and passwords
- Local time of day, date, Greenwich Mean Time (GMT), and time zone
- Product Information (used for EAN-8, EAN-13, UPC-A, and UPC-E Symbologies)

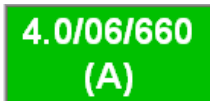
## CALIBRATION TAB

The **Calibration** tab is where calibration of the system occurs. The INTEGRA 9580 is supplied with an EAN/UPC NIST Traceable Calibrated Conformance Standard Test Card provided by GS1 to ensure the system is always within a known calibration standard.

## GRADING TAB

The **Grading** tab allows the user to perform the following functions:

- View the overall grade of the bar code.
- Select one of two ways to verify a bar code: Full or Pass/Fail.
  - The "Full" option analyzes a bar code in detail and displays the ISO parameters.




**Passing Grade**


**Failing Grade**

  - The "Pass/Fail" option analyzes a bar code in detail and displays "Pass" if the bar code passed or "Fail" if the bar code failed.



- Viewing options such as:

| OPTION | DESCRIPTION |
|---|---|
| Contrast | Contrast of each scan line on the bar code. |
| Modulation | Allows you to view a modulation error. |
| Decodability | Indicates the measurement of the deviation of the width of bars and spaces when compared to their ideal widths. |
| Defects | Indicates elements on the correct side of the global threshold but have deviation in reflectance. |
| OCR | Verifies the human readable portion of a bar code. |
| Zoom | Allows you to zoom in on an image. |

- Verify the following types of codes: linear codes, two-dimensional matrix codes and two-dimensional multi-row codes.

- View all of the measured parameters individually, which are used to determine why a bar code has a certain grade. There are numerous parameters listed, depending on the symbology.
- Checks for Blemishes.
- Height and Width measurements of the bar code.
- Color Code legend which reports ISO/IEC grades by color code.

## ZOOM TAB

The **Zoom** tab allows you to further evaluate the quality of bar codes by magnifying the bar code image up to four times. You can change the position of magnification by clicking on a different position on the image, and you can also change the horizontal and vertical position of the image.

## SRP VIEW TAB

The **SRP** (Scan Reflectance Profile) tab allows you to further evaluate a bar code error by selecting what type of error will be super-imposed onto the SRP graph. Options include:

- Element Reflectance
- Modulation
- Decodability (width of each element)
- Defects (inflection to element reflectance)
- Full Screen Waveform
- Traditional Bar Growth and Shrinkage

## STRUCTURE TAB

Many organizations throughout the world create bar code labels according to a set of rules used to standardize how bar code data is to be structured in order to easily transfer trade-related information between two parties. For the most part, these rules were created and governed by an international group called ISO/IEC. The **Structure** tab shows the data structure analysis of all bar code symbologies.

## ARCHIVE TAB

When a bar code image is captured, the INTEGRA 9580 analyzes the image and determines if the image is different from the last bar code image collected. If the image is different, the software stores the new report and marks it with a file number along with a new date/time stamp. The **Archive** Tab allows you to access these various reports and files, which are stored in an SQL-compatible database. Archive options include:

- Import Image from File
- Export Image to File
- Recent Reports (last 30 days)
- Delete Prior to Specific Date
- Software Version History Files
- Audit Trail Report
- Calibration Report (History)
- Reference Report
- Export reference data
- Change SQL connection
- Create Backup database
- Browse Backup database

# TERMS AND CONDITIONS

## QUOTED TERMS

An LVS® Price Book or sales quotation provided by an LVS® Sales Representative or Distributor determines the pricing of the system. Quotations are valid for 60 days from the Quotation date. Any modifications will necessitate a new Quotation.

## SHIPPING

Varies based on quoted system. INTEGRA 9580 systems ship approximately 10 business days after receipt of order. Shipment is dependent on LVS® production schedules at receipt of Purchase Order. LVS® will acknowledge receipt of Purchase Order and delivery date.

All systems ship via truck transport/courier service against customer Account Number. All prices are F.O.B (EXW – International) Label Vision Systems' facility in Peachtree City, Georgia 30269 USA.

## PAYMENT TERMS

Payment is due 30 days from date of invoice with approved credit terms or as agreed in writing. Payment in advance for orders until credit terms approved. All prices are F.O.B (EXW – International) Label Vision Systems' facility in Peachtree City, Georgia 30269 USA.

## WARRANTY

For customers outside the United States, LVS® warrants the quoted system will be free of LVS® manufacturing defects for a period of one year from the date of shipment to Customer and will conform with all current specifications at time of product shipment. At its option, Label Vision Systems, Inc. will replace or repair defective goods at no charge. Consumable items (such as cables, accessories and spare parts) are excluded from this warranty.

Customer shall pay to ship goods to and from Label Vision Systems' facility. If personnel must travel to Customer's location, Customer shall bear those travel expense. THIS WARRANTY IS IN LEIU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. LABEL VISION SYSTEMS MAKES NO WARRANTY THAT SAID GOODS ARE FIT FOR ANY PARTICULAR PURPOSE, NOR ANY WARRANTY AS TO THE MERCHANTABILITY OR QUALITY OF GOODS SOLD EXCEPT AS HEREIN STATED. Under no circumstances will Label Vision Systems be liable for any special or consequential damages.

## TECHNICAL SUPPORT

- ### TECHNICAL SUPPORT - USA

  LVS® provides telephone support (+1-770-487-6414) five days a week from 9:00 a.m. to 4:00 p.m., Monday through Friday (EST/EDT). Online support with an LVS® representative is available via the following web-based system:

www.gottomypc.com; customer must have an Internet connection with complete access to the LVS® system. Contact your LVS® representative to initiate a GoToMyPC online session.

- TECHNICAL SUPPORT - INTERNATIONAL

  Contact your local distributor as listed on the LVS® Web site (www.lvs-inc.com) or contact LVS® Headquarters in the USA as defined in the above section.

## CANCELLATION

After LVS® accepts your order, the Customer may not cancel the order without LVS'® written consent. In the event of cancellation, Customer shall pay LVS® as liquidated damages all cost incurred by LVS® in connection with the contract, including actual labor and material, and the costs of materials on hand which were acquired or produced in connection with this order, plus an additional 40% of those costs.

## PRODUCT RETURNS

Customer may return purchased system within 30 days from date of shipment from LVS® facility. Customer is charged 25% of system purchase price as a restocking fee and shall pay to ship goods to LVS® facility in Peachtree City, Georgia 30269 USA. The system must be returned in the original packaging in which it was received. Customer will be charged for any missing parts or damage to the system.

# ABOUT LVS®

For over 30 years, LVS® has designed, developed, and manufactured print quality vision inspection and verification systems, leveraging our patented methodology in bar code imaging and ISO (ANSI) bar code grading. LVS® has installations in over 40 countries and maintains a commitment of excellence to our customers, the print industry and the vision products we produce. LVS® is proud to be ISO 9001:2008 certified; a GS1-US Solution Provider; and our INTEGRA 95XX products are GS1-US certified.

## ISO 9001:2008 Certification and 21 CFR Part 820 Compliant (cGMP)

LVS® received ISO 9001:2008 certification from the National Quality Assurance, USA (NQA, USA).

The receipt of ISO 9001:2008 registration is the most widely recognized standard for quality management systems. ISO 9001:2008 certification validates LVS'® commitment to all our customers and guarantees that continued improvement and compliance are achieved.

LVS'® manufacturing processes are 21 CFR Part 820 Compliant (cGMP).

## Our Products

LVS® products are unique in the world as they inspect variable printed data and bar codes to guidelines established by the International Standards Organization (ISO).

*INTEGRA 9510*

LVS® provides print quality inspection systems for both off-line and in-line applications.

Off-line verifiers are the INTEGRA 95XX Series, which include the INTEGRA 9510, INTEGRA 9570 and INTEGRA 9580. The INTEGRA 95XX Series of verifiers are unique in the world of ISO verification due to their ease of use and ability to verify linear (1D) and two-dimensional (2D) codes without any change of equipment; autodiscriminate the symbology, narrow bar width and aperature to be used to evaluate the code; and highlight trouble spots in the code. The INTEGRA 95XX Series of verifiers offer numerous, impressive analytical tools used to identify and evaluate bar code problems. The INTEGRA 95XX Series are certified by GS1 US and are 21 CFR Part 11 compliant-ready.

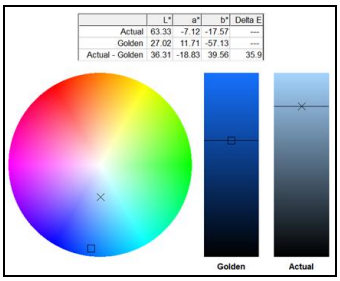
*INTEGRA 9580*

*INTEGRA 9570*

The in-line LVS® 7000 system is a high speed, user-friendly vision system that improves the quality inspection process and reduces the related manpower. The LVS® 7000 verifies to ISO/IEC standards all bar codes and matrix codes as they are printed, validates sequential or random number sequences, as well as fullfills the normal print quality inspection steps. Features include:

*LVS® 7000*

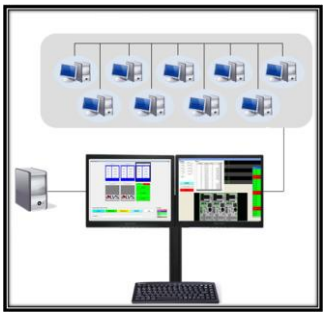
- Delta E Color Process Control – Calculates the average L*a*b* values of all the pixels within a sector according to CIE 2000 specifications
- Master-to-Label Comparison – Detects blemishes, smears, skews, missing copy, print registration and edge determination
- Full ISO (ANSI) verification of 1D and 2D Bar codes, including Linear, Data Matrix and Stacked codes. Verifies codes in any orientation
- OCR/OCV Inspection – File Matching; Duplicate Checking; and Random or Sequential Data Validation
- Roll Inspection Mapping System (RIMS) – Designed to complete the workflow process. Linked to the LVS® 7000 or LVS® 7500, RIMS will map and record each error deteced on the press. The electronic mapping file can be called up remotely with the Quality Control Manager to be pre-cleaned for errors and special directions entered for the finishing operator. Using a simple and easy-to-use tracking module, LVS® RIMS will automatically stop the rewind (rewind must be capable)




*Delta E Color Process Control*

- HMI Command Center – Beneficial for customers needing to view and interact with multiple vision systems in remote locations from a single monitor. The system uses a dual-monitor console to view and fully interact with a maximum of nine LVS® 7000/7500 systems, or non-LVS® systems.

  The LVS® 7000 can be mounted on a press, slitter/rewinder, folder gluer, conveyor and most other inspection platforms.



*HMI Command Center*

- Auto Scan – Allows an operator to simultaneously monitor and analyze up to 16 areas of interest per job on the web without having to manually move between each area of interest. While a job is running, an operator can choose to view all of the areas at once or cycle between full image views of each location; this allows the operator to keep track of the printing process while the LVS® 7000 is inspecting all of the labels for defects.
- PDF Comparator – Allows the comparison of PDF artwork to the LVS® golden image for the actual print job.

The LVS® 7500 offers 100% print quality inspection and bar code verification capabilities for use with Thermal Transfer Printers and other media. Built on the powerful LVS® 7000 software platform, the LVS® 7500 functions include master-to-label comparison (blemish detection), bar code verification (1D and 2D) , bar code validation, optical character recognition (OCR), optical character verification (OCV), field matching, and number/data validation. The LVS® 7500 provides a cost-effective means to identify defects, avoid liability, reduce re-work, and control waste resulting from labeling or print quality errors.

*LVS® 7500*

## GS1 US Solution Partner

LVS® is proud to be a GS1 US Solution Partner.

## Contact Us

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