LVS-7510 for Zebra ZT600 Series

Thermal Printer Label Inspection System

Ensure that 100% of labels are compliant with regulations and quality requirements at the point of label production, avoiding costly downstream errors. The LVS-7510 is now available for the Zebra ZT600 series of printers, providing 100% print quality inspection and barcode verification without slowing down the printing operation.

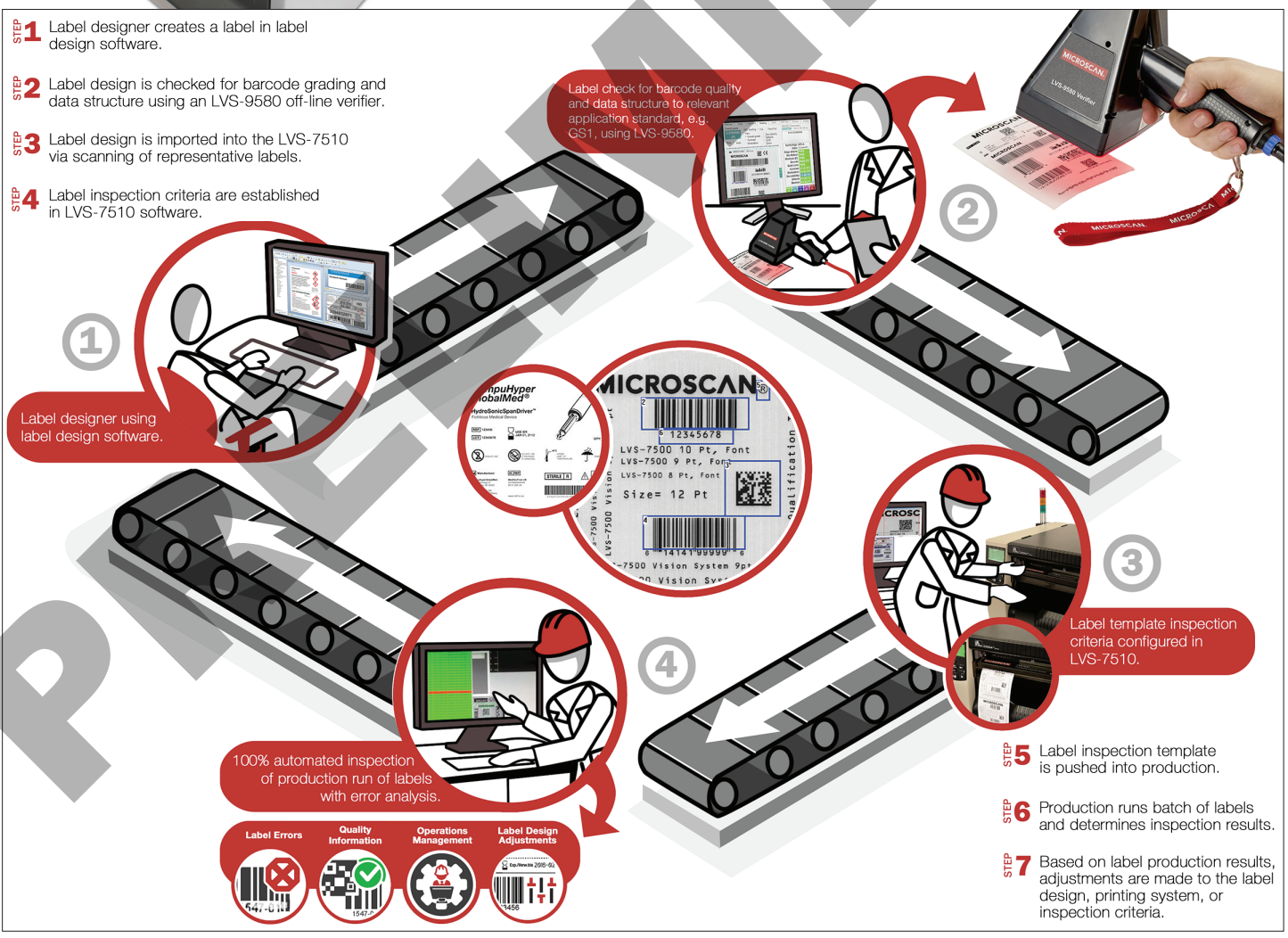
PRELIMINARY

STEP 1 Label designer creates a label in label design software.

STEP 2 Label design is checked for barcode grading and data structure using an LVS-9580 off-line verifier.

STEP 3 Label design is imported into the LVS-7510 via scanning of representative labels.

STEP 4 Label inspection criteria are established in LVS-7510 software.



STEP 5 Label inspection template is pushed into production.

STEP 6 Production runs batch of labels and determines inspection results.

STEP 7 Based on label production results, adjustments are made to the label design, printing system, or inspection criteria.

MICROSCAN®

LVS–7510 for Zebra ZT600-Series Thermal Transfer Printers

Barcode Verification and Trend Graphing

Data Matrix verification parameters and results

Sector1	Bar code 2D grade
Minimum passing score	1.5
okay	33 / 33 = 100%
DecodedText	50000-0.1MG DOSE CARTON to 50029-0.1MG DOSE CARTON
Overall	B:11 (33%), C:22 (67%)
Symbology	Data Matrix
Xdim	22.2 to 22.4, average was 22.3
Contrast	B:23 (70%), C:10 (30%)
Modulation	B:15 (45%), C:18 (55%)
AxialNonUniform	A:33 (100%)
GridNonUniform	A:33 (100%)
UnusedEC	A:33 (100%)
FixedPat	A:31 (94%), B:2 (6%)

Grade 1D and 2D symbols to ISO/IEC 15415 and ISO/IEC 15416 standards with user-configurable thresholds for establishing a "pass" grade. ECC-200 Data Matrix, QR Code, PDF417, MicroPDF417, GS1-128, Code 39, UPC-A, UPC-E, EAN, Aztec, and other symbologies are supported.

Blemish Detection

Golden Toggle Actual

Create and store hundreds of reference "golden images" with the ability to detect print faults, to distinguish fixed from variable information, to detect die-cut errors and label misalignment, and to identify missing information. Blemish, barcode, and OCR/OCV error images can be viewed on the operator HMI.

OCR and OCV

Verify Optical Character Recognition (OCR) and Optical Character Verification (OCV) data such as lot number or expiration date, comparing information against expected values and triggering errors when a mismatch occurs. Validation of an expected numerical series, such as serial numbers, can be compared against an imported file containing expected numbers. The system can be trained to learned additional Latin-based character fonts.

LVS-7510 Functionality at a Glance

- *Used for product label verification in medical device manufacturing, pharmaceutical manufacturing, consumer goods packaging, cosmetics packaging, food and beverage packaging, and specialty chemical applications.*
- *100% label inspection, including 1D/2D barcode quality verification, OCR/OCV verification, serialization, and blemish detection.*
- *Available with optional peel and present and internal rewinder*
- *Provides operator notification of print quality degradation, enabling proactive maintenance.*
- *Can be used with off-line verifiers to create a seamless label design and production quality system.*

For more information, visit www.microscan.com/LVS-7510.

Database Archive and Connectivity

Job data is archived and stored in .csv file format for ease of export. All records are date, time-stamped and automatically archived. Remotely review errors and record acceptance or rejection action. Run summary report for quality control and data validity checking. Import of matchfile date in .csv format for use in inspection jobs supported. Data exchange via TCP/IP commands is supported.

Error Notification

Multiple output options for error notification including stop relay interface to the printer, external light stack, and on-screen warning set to user-defined thresholds.

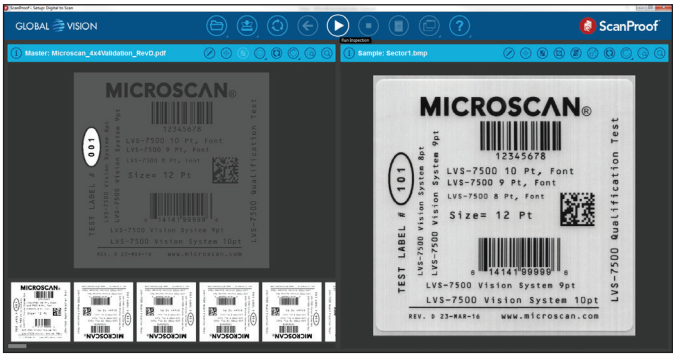
Validated System Applications

21 CFR part 11-compliant-ready with multiple security levels and comprehensive data management and reporting options. Microsoft Active Directory, audit trail of operator actions, and inspection archive for each label.

AutoExecute Function

AutoExecute allows the user to initiate the automatic import of one or more LVS-7510 jobs. This helps automate the processing of multiple jobs without operator interaction.

Optional PDF Comparator Software



The PDF Comparator is an optional advanced error detection program for the LVS-7510 which compares one reference "golden image" to a PDF master artwork file selected by the user. The PDF Comparator compares the approved master artwork file to the golden image, and the Blemish Detection Tool compares the golden image to the rest of the labels.

Accuracy and Data Integrity

- *Lower Inspection Costs*
- *Identify Defects*
- *Maintain Quality*
- *Reduce Rework*
- *Control Waste*
- *Reduce Non-Compliance Risk*

Typical LVS-7510 Applications

- *Medical Device Manufacturing*
- *Pharmaceutical Manufacturing*
- *Consumer Goods Packaging*
- *Specialty Chemical Manufacturing*

LVS–7510 for Zebra ZT600-Series Thermal Transfer Printers

Product Compatibility

Microscan LVS-7510 Software has been tested by Zebra and is certified as compatible with Zebra ZT600-series printers.

ZEBRA

Microscan Systems, Inc

LVS-7510 v20.2.1.309

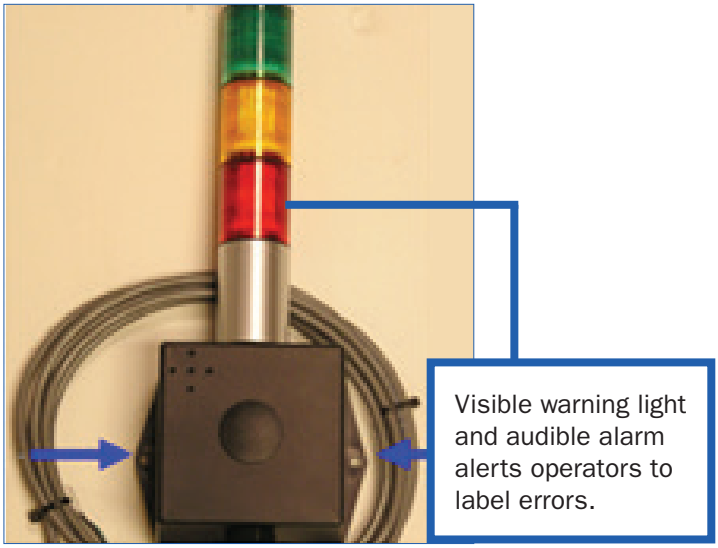
SUCCESSFULLY TESTED COMPATIBLE WITH ZEBRA PRINTER SERIES

ZT600 Series Industrial Printers

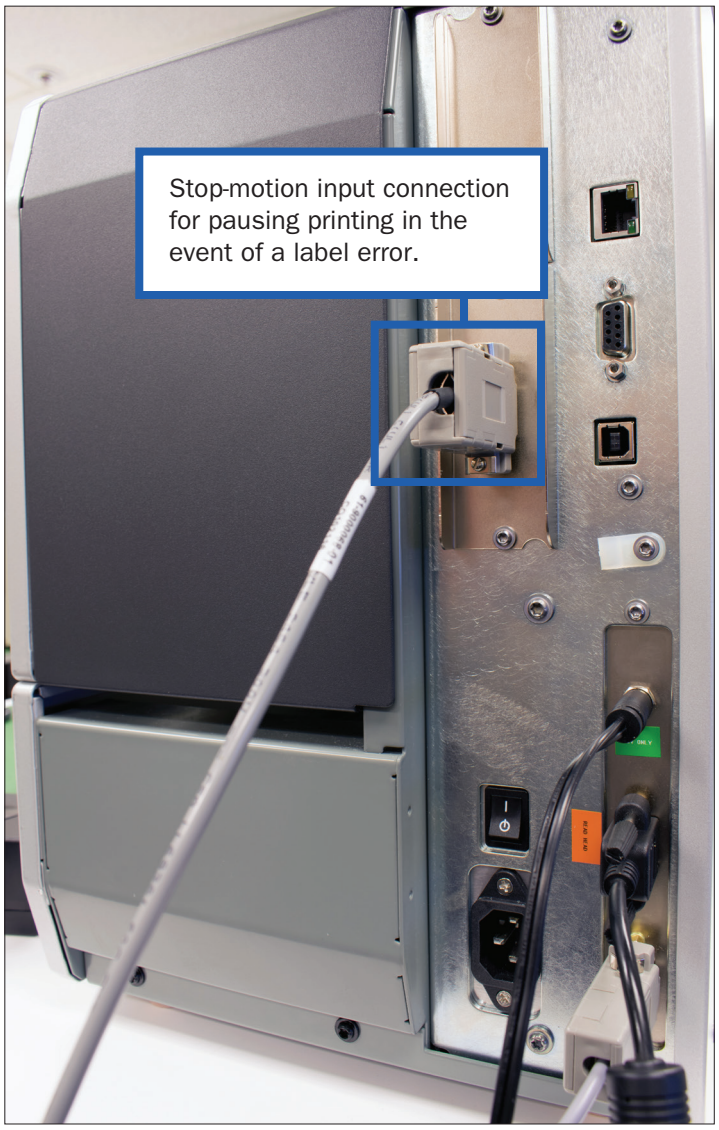
June, 2017

COMPATIBLE
ZEBRA

Daniel Quagliana
Global Alliance & ISV Engineering Manager
June, 2017



Feature Overview



LVS–7510 for Zebra ZT600-Series Thermal Transfer Printers

AVAILABLE MODELS[1]

Zebra ZT600-Series Part Number	Omron Microscan LVS-7510 Part Number[2]	Description
ZT61043-T010100Z	7510P-5-ZT610-300DPI	LVS-7510-5-ZT610-300DPI, INTEGRATED W/Zebra ZT610 300 DPI
ZT61046-T010100Z	7510P-5-ZT610-600DPI	LVS-7510-5-ZT610-600DPI, INTEGRATED W/Zebra ZT610 600 DPI
ZT61043-T210100Z	7510P-5-ZT610-300DPI-PP	LVS-7510-5-ZT610-300DPI, INTEGRATED W/Zebra ZT610 300 DPI with Peel and Present plus Rewinder
ZT61046-T210100Z	7510P-5-ZT610-600DPI-PP	LVS-7510-5-ZT610-600DPI, INTEGRATED W/Zebra ZT610 600 DPI with Peel and Present plus Rewinder
ZT62063-T010100Z	7510P-8-ZT620-300DPI	LVS-7510-8-ZT620-300DPI, INTEGRATED W/Zebra ZT620 300 DPI
ZT62063-T210100Z	7510P-8-ZT620-300DPI-PP	LVS-7510-8-ZT620-300DPI, INTEGRATED W/Zebra ZT620 300 DPI with Peel and Present plus Rewinder

[1]Contact Omron Microscan for additional models not listed here.
[2]Assembly number includes factory integration with printer.

SPECIFICATIONS

Maximum Print Speed	Up to 254 mm/sec (10"/sec)
Supported Print Widths	Up to 104 mm (4.09") of label width inspected; maximum web width of 114 mm (4.5")
Barcode Verification	Grading according to ISO 15415 and ISO 15416 of 1D and 2D codes, including GS1 symbologies
Minimum Barcode Dimension	For reading only: 1D = 0.160 mm (0.0063") 2D = 0.254 mm (0.0100") For verification: 1D = 0.223 mm (0.0088") 2D = 0.317 mm (0.0125")
OCR Fonts Supported	Minimum 6-point font, Latin-based fonts, monospaced fonts, OCR-B for upper and lower case
Environmental	Operating Temperature: 10° to 30° C (50° to 86° F) Relative Humidity, Operating: 20% to 80% (non-condensing); Relative Humidity, Storage: 20% to 95% (non-condensing)

SYSTEM PERFORMANCE AND REQUIREMENTS

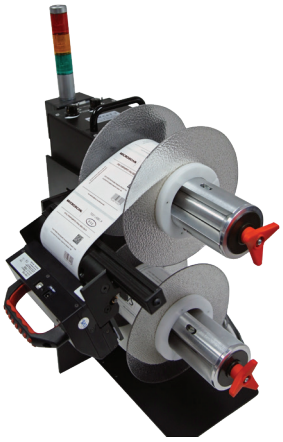
- Inspects at print speeds of up to 254 mm/sec (10"/sec)
- Requires PC for each connected printer, with Intel® Quad Core 2.6GHz processor, 4GB RAM, 500 GB storage
- Windows® 7, Windows® 8.1 Pro, or Windows® 10 Pro

SERVICES AND ACCESSORIES

98-LVS0092B	7510 IQ/OQ Validation Procedure Guidelines
98-LVS00035	Onsite Training (Per Day)
98-LVS00174	Onsite Installation (Per Day)
98-LVS00025	Online Training and Support - 4 Hours
98-LVS0092A	7500 IQ/OQ Validation Procedure Guidelines
98-CAL017-01	Calibration Conformance Test Card, 7500 5
98-CAL018-01	Calibration Conformance Test Card, 7500 8
REPAIR	Time and Material for Repairs (Per Hour)
98-12EW-VER-75XX	12-Month Extended Warranty, LVS-75XX
98-24EW-VER-75XX	24-Month Extended Warranty, LVS-75XX

ALSO AVAILABLE FROM OMRON MICROSCAN

LVS-7500 with External Dual-Spindle Rewinder



Standalone label rewinder that can be configured for use with the LVS-7500/LVS-7510. This system is ideal for use with multiple printers supplying to a central inspection location. The dual spindle rewinder is a cost-effective, 100% inspection solution. Supports roll diameters up to 218 mm (8.5"), and inspection speeds up to 305 mm (12") per second.

LVS-7500 External System

For use with a broad variety of thermal label printers that have I/O interface capability. Adjustable stainless steel mounting brackets allow the readhead to be mounted and matched to the height of the printer. The user's printer is placed onto the steel base plate where the printer discharge aligns to the LVS-7500 readhead.

SAFETY CERTIFICATIONS DESIGNED FOR

FCC, CE, UL

RoHS COMPLIANT

QMS CERTIFICATION

www.microscan.com/quality

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Warranty – For current warranty information about this product, please visit www.microscan.com/warranty.

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