Ensure that every label
meets your quality standards

OMRON

V275 Series

Print Quality Inspection Systems

- Inspect 100% of labels for print quality
- Verify 1D and 2D codes to ISO standards
- Ensure compliance with regulations and quality requirements

Applications and Benefits

Ensure compliance with regulations and quality requirements

The LVS V275 Series print quality inspection system grades 1-D barcodes to ISO/IEC 15416 and 2-D symbols to ISO/IEC 15415 standards. This system conforms to ISO/IEC 15426 for barcode verification systems. Users can configure the threshold for establishing a passing grade. All popular barcode symbologies are supported.

Typical V275 Applications

Life Sciences

- Create labels that comply with FDA UDI and EU MDR.
- Ensure all labels comply with the FDA DSCSA and EU Falsified Medicines Directive.

Packaging

- Avoid rejected products and chargebacks from retailers and customs offices due to unreadable labels.

Automotive

- OEMs produce VIN labels and tire pressure labels that are accurate, reflect well on the brand, and easily pass customs inspections.
- Suppliers avoid rejected product and chargebacks by accurately labeling products and printing 100% readable shipping labels.

V275 Key Benefits

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

Barcode Verification

Inspect labels without slowing printing operations

Optical Character Recognition and Validation (OCR and OCV)

- Verify Optical Character Recognition (OCR) and Optical Character Validation (OCV) data, such as lot number or expiration date
- Compare information against expected values
- Trigger alarms when a mismatch occurs
- Validate expected alphanumeric series, such as serial numbers
- Compare values against an imported file containing expected numbers
- Learn additional Latin-based character fonts

Error Descriptions and Blemish Examples

Damaged or unreadable characters

Incorrect data (expected 999)

Missing Data

Graphic blemishes (should be 'registered' mark)

Blemishes in fixed symbols

Cosmetic blemishes in logos

Connectivity

The V275 system can be operated either locally from the V275 server computer or remotely using a supported remote client connection. Inspection results can be viewed while logged into the system using either method. Inspection automation is supported using a REST interface.

Data Archive and Exporting

All print job inspection results are time stamped, and persist on the V275 server for later retrieval and viewing using the client UI. Persisted inspection results can be exported as a PDF summary or as a detailed JSON report.

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

The LVS V275 is 21 CFR Part 11 compliant-ready with multiple security levels, comprehensive data management, and reporting options. Microsoft® Active Directory, audit trail of operator actions, and inspection archive for each label.

Audit Trail

V275 software maintains a complete audit trail to support compliance with quality processes, and to enable compliance with 21 CFR Part 11.

IQ/OQ/PQ

Omron offers a companion IQ/OQ/PQ procedure to assist customers with maintenance of their quality processes. The IQ/OQ/PQ procedure documents that the V275 system has been installed properly, it operates correctly, and that personnel are adequately trained to run the system in a production environment.

Features

Read head fits inside the envelope of the printer

Tight integration allows for consistent operation of one inspection template across multiple systems

600 dpi sensor enables grading small symbols and reading small text

Patented, floating head design to maintain proper focal distance from the label

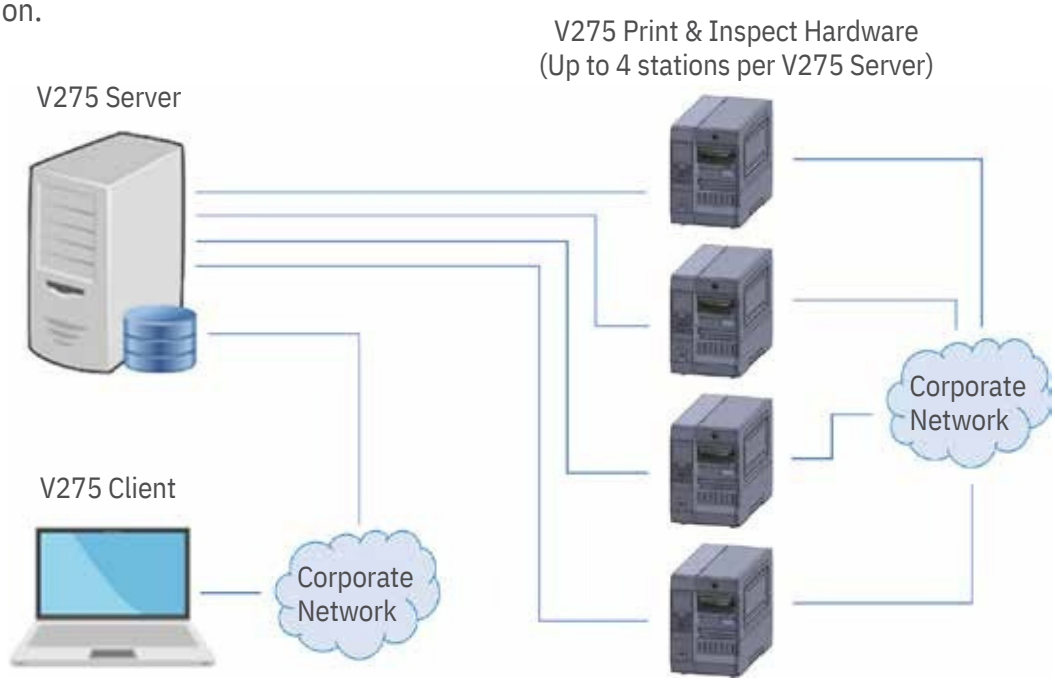
Loopback connector for stop motion controls included

PoE for easy communications and power

V275 System Overview

The V275 system consists of hardware and software components. The major elements of a V275 Print Quality Inspection System are:

- V275 Print & Inspect Hardware: This is the hardware part of the system. It consists of a line-scan camera, printed circuit boards, image capture firmware and related hardware integrated into a Zebra ZT6x0 printer.
- V275 Server: This software is the brains of the system. It runs as a service on a customer supplied computer and communicates with the Print & Inspect hardware over dedicated Gigabit Ethernet ports. The V275 Server analyzes image data received from the Print & Inspect Hardware to determine if it meets the specified quality standards.
- V275 Clients: This software provides the user interface that allows an operator to design inspection criteria and to run print and inspect jobs. The V275 UI is a web based user interface that runs in a supported browser. This client UI can be accessed locally on the V275 server PC or from a supported network client connection.



The V275 system architecture is designed to allow the flexibility to locate the V275 Server component in a central location, while accessing and controlling the system from any computer with a web browser and authorized access. It eliminates the need to have a server computer located next to every print & inspect hardware unit.

By assigning each operator a unique login and the appropriate permissions, the system administrator can create a system that allows some users the right to have full access to the system and to create print inspection templates—while other users can bypass the design and setup functions and move straight to running and inspecting a print job.

The V275 Print Inspection System maintains a complete audit trail to allow compliance with internal and regulatory quality mandates. The audit trail can be exported for use with external systems. Until it is exported, the audit trail is accessible only to V275 System users who are authorized to view it.

V275 and Accessories

Appearance	Description	Part Number
	V275 print quality inspection engine, integrated into a 300-dpi resolution Zebra ZT610 printer. Print and verify labels up to 4.1” wide at speeds up to 12 inches per second.	V275-P46Z61030-CC
	Same as above, with peel and present capability.	V275-P46Z6103P-CC
	V275 print quality inspection engine, integrated into a 600 dpi resolution Zebra ZT610 printer. Print and verify labels up to 4.1” wide at speeds up to 6 inches per second.	V275-P46Z61060-CC
	Same as above, with peel and present capability.	V275-P46Z6106P-CC
	V275 print quality inspection engine, integrated into a 300 dpi resolution Zebra ZT620 printer. Print and verify labels up to 6.6” wide at speeds up to 8 inches per second.	V275-P86Z62030-CC
	Same as above, with peel and present capability.	V275-P86Z6203P-CC

Appearance	Description	Part Number
	Light tower for use with the V275. Includes light tower and cable for connecting with Zebra printer.	V275-ALRYGZZT
	Cable for connecting the V275 Zebra printer with a customer-supplied light tower. Cable is 2m long and has flying leads to allow adaptation to almost any light tower. Customer is responsible for connection to the light tower.	V275-ALCBL0ZT
	Replacement EAN/UPS Conformance Calibration Standard Test Card for V275 in Zebra ZT610 printer, dated.	V275-ACEAN028
	Replacement EAN/UPS Conformance Calibration Standard Test Card for V275 in Zebra ZT610 printer, undated.	V275-ACEAN028-01
	Replacement EAN/UPS Conformance Calibration Standard Test Card for V275 in Zebra ZT620 printer, dated.	V275-ACEAN029
	Replacement EAN/UPS Conformance Calibration Standard Test Card for V275 in Zebra ZT620 printer, undated.	V275-ACEAN029-01
Image not available Image not available	IQ/OQ/PQ Procedure for V275 system with 300DPI printer	V275-APIQOQ03-01
	IQ/OQ/PQ Procedure for V275 system with 600DPI printer	V275-APIQOQ06-01

Ordering Information

Service and Repair Kits

Appearance	Description	Part Number
	Replacement readhead kit for Zebra ZT610-based V275 systems.	V275-RRH04ZEB
	Replacement readhead kit for Zebra ZT620-based V275 systems.	V275-RRH06ZEB
	PCB replacement kit for Zebra-based V275 systems.	V275-RBS00ZEB
	Encoder replacement kit for Zebra-based V275 systems.	V275-RENC0ZEB
	Peel and present sensor replacement kit for Zebra-based V275 sys- tems.	V275-RPPS0ZEB
	Rear panel replacement kit for Zebra-based V275 systems. Includes internal cabling.	V275-RRPC0ZEB

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