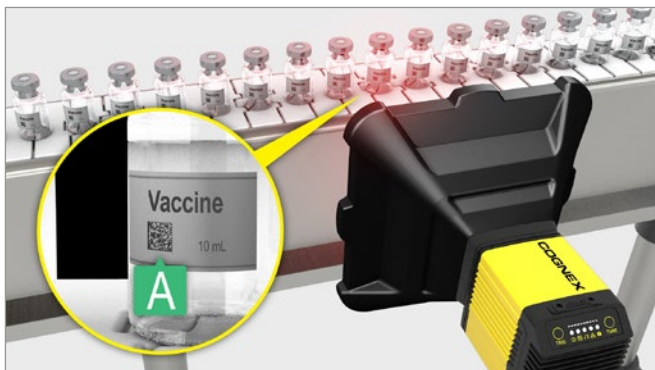


DATAMAN 475V SERIES INLINE BARCODE VERIFIER

Automate code quality assurance without slowing down production

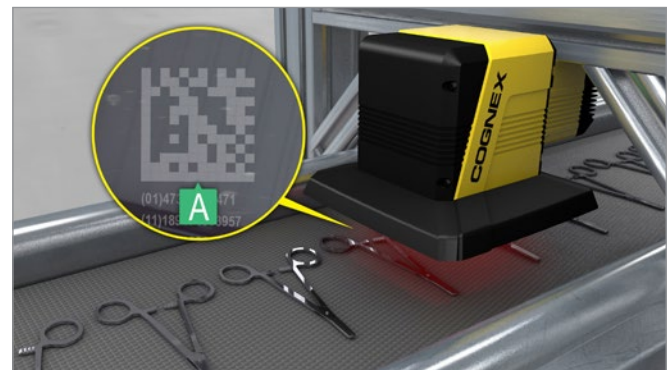
Barcode verification is the process of grading the quality of barcodes according to globally accepted ISO standards. Cognex barcode verification technology ensures the readability and compliance of 1D and 2D barcodes. Today most companies spot check codes one at a time using an offline, operator-based verifier which can be slow and prone to errors.

The DataMan® 475V series inline barcode verifier can grade up to 20 codes per second. High-speed 100% verification and quality reporting can be done directly on your production line, preventing product waste and costly chargebacks. Immediate feedback and intuitive visual diagnostics provide operators with the ability to identify and correct printing and process control issues as they happen. For every code verified, detailed reports can be archived to ensure traceability, statistical process control, and compliance.



Label-based barcode quality compliance

The DataMan 475V-label uses a four-quadrant, 45-degree lighting attachment for grading 1D and 2D label-based barcodes. This model is compliant with the International Organization for Standardization (ISO) 15416 and 15415 standards.



Direct part mark (DPM) code quality compliance

DM 475V-DPM illuminates codes on textured, curved, and highly reflective surfaces using a multi-quadrant lighting attachment with 30S, 30Q, 30T, 45, and 90-degree lighting options. This model is compliant with ISO/IEC TR 29158.



The included calibration card and robust grading algorithms ensure that the DataMan 475V conforms to ISO and application standards while providing accurate and repeatable results.

ISO Quality Standards:

- ISO 15416
- ISO 15415
- ISO/IEC TR 29158 (AIM DPM)

Verify on high speed lines without sacrificing analytics

The DataMan 475V barcode verification software provides intuitive visual diagnostic information to identify one-off or trending code quality issues. It assigns an overall grade to a code based on measurements of ISO-defined quality parameters. These parameters measure several factors that affect a barcode reader's ability to identify and decode a code, maximizing read rates down-process.

Whether using for real-time diagnostics, archiving results for traceability and compliance, or aggregating for statistical process analysis, the Dataman 475V provides the flexibility and wealth of data to meet your code quality assurance needs.

The screenshot shows the DataMan 475V software interface. At the top, it displays the overall grade: **Overall ISO15415 Grade D (1.8) 1.0/20/640/45**. Below this, a list of **Grade Parameters** is shown with color-coded status indicators: Unread Error Correction (ERC) is 33% B (red), Symbol Contrast (SC) is 60% B (orange), Modulation (MOD) is A (green), Reference Margin (RM) is C (yellow), Axial Nonuniformity (ANU) is 0.7% A (green), Grid Nonuniformity (GNU) is 1.1% A (green), Fixed Return Damage (FRD) is 4.0 A (green), Left 1/2 Side (LS) is A (green), Bottom 1/2 Side (BS) is A (green), Left Quiet Zone (LQZ) is A (green), Bottom Quiet Zone (BQZ) is A (green), Top Quiet Zone (TQZ) is A (green), Right Quiet Zone (RQZ) is A (green), Top Transition Ratio (TR) is 0% A (green), Right Transition Ratio (RR) is 0% A (green), Top Clock Tracks (CT) is A (green), Right Clock Tracks (CR) is A (green), Average Grade (AG) is 4.0 A (green), and DBCODE is 080008.

Other interface elements include:

- Pre-loaded application standards:** A green bar at the bottom left indicates 'Generic Acceptance Criteria Pass' and 'Data IN1000'.
- Real time trend analysis:** A line graph at the bottom center shows grade trends over time.
- Adjustable grade trend threshold alerts:** A green bar at the bottom right indicates 'Overall Verification Pass 0 out of the last 100 verifications failed the current application standard. Threshold is 40/100'.
- Individual quality parameter grades:** A list of parameters on the right side, each with a color-coded grade.
- Overall grade:** A red box at the top right displays the overall grade.

Diagnose code quality issues quickly and easily with color-coded, data-rich visual diagnostic tools.

The left screenshot shows a data-rich grid with columns numbered -1 to 12 and rows numbered 0 to 12. Each cell contains a numerical value representing a quality parameter measurement. The grid is color-coded, with green indicating good performance and red indicating a failure. The right screenshot shows a barcode with a quality overlay, where different parts of the barcode are highlighted in green, yellow, or red to indicate quality issues.

Automatically save data-rich PDF or HTML reports for every verification or only for problem codes.

The left screenshot shows a PDF report with a header, a QR code, and a table of data. The right screenshot shows an HTML report with a similar layout, including a QR code and a table of data.

Archive the full data from each ISO verification result to an FTP server or the cloud.

The screenshot shows a table of verification results. The columns include ISO standard, grade, and other metrics. The data is color-coded, with green indicating a pass and red indicating a fail. The table lists various ISO standards such as ISO 15415, ISO 15416, and ISO 15417, along with their respective grades and other metrics.

SPECIFICATIONS

	DataMan 475V-label	DataMan 475V-DPM
Lighting Types	660 nm, 45°, 4-quadrant	660 nm, 45°, 4-quadrant 660 nm, 30°, 1-quadrant, 2 quadrant, 4-quadrant 660 nm, 90°
Symbologies	1D: UPC/EAN, Code 128, ITF-14, I25, Code 39, Code 93, Codabar 2D: Data Matrix (ECC 200), QR Code, Micro QR Code, PDF417	2D: Data Matrix (ECC 200), QR Code, Micro QR Code, UPC/EAN, Code 128, Code 39
Field of View	80 x 60 mm	35 x 29 mm
Working Distance	60 mm	41 mm
Depth of Field (WD Tolerance)	+/- 3 mm	5 mil symbols: +/- 1.5 mm 15 mil symbols: +/- 2.5 mm
Minimum X-Dimension	6 mil (0.15 mm)	3.75 mil (0.095 mm)
Image Sensor	Sony IMX264LLR 5 MP (2448 x 2048 pixels) 2/3 inch CMOS, global shutter 8.8 mm x 6.6 mm (H x V); 3.45 µm square pixels	
Lens Type	12 mm fixed focal length, f/4 fixed aperture, 2/3 inch sensor format, C-mount lens (users cannot alter lens)	35 mm fixed focal length, f/4 fixed aperture, 2/3 inch sensor format, C-mount lens (users cannot alter lens)
Communications	Ethernet	
Power Consumption	24 VDC±10%, 1.5 A max (36 W peak)	
Weight	945 g	1002.7 g
Dimensions	185 x 185 x 175 mm	286 x 144 x 190 mm
Environmental Protection	IP65	IP65 with cables and appropriate lens cover attached
Approvals	CE, TUV, FCC, KC	
Industry Standards Compliance	ISO/IEC 15415, ISO/IEC 15416, ISO/IEC TR 29158, ISO/IEC 15426-1, ISO/IEC 15426-2	
Application Standards	GS1, MIL-STD 130 UID, UDI, HIBCC, ISO 15434, Russian Crypto-Code, Custom Application Standards	
Maximum Codes per Second	1D: 20 codes/second* 2D: 10 codes/second*	2D: 10 codes/second*
Maximum Linear Line Speed	3.6 ft/second (1.1 m/second)	4.6 ft/sec (1.4 m/sec)
Coplanarity Tolerance	+/- 3° of coplanar	+/- 2° of coplanar

* Maximum symbols per second is dependent upon symbol size, mil size, substrate, symbology, and other application factors.

COGNEX

Companies around the world rely on Cognex vision and barcode reading solutions to optimize quality, drive down costs and control traceability.

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