DATAMAN 475VS SERIES OFFLINE BARCODE VERIFIER

The next generation of offline verification

Cognex barcode verifiers ensure 1D and 2D barcodes are ISO compliant and readable. DataMan® 475VS series verifiers offer more robust grading algorithms, diagnostic tools, and reporting options than any offline verifier on the market.

The adjustable stand and embedded software focusing provide users with an easy, fast, and accurate way to present labels and parts. Safeguard and secure code-reading results and obtain the best images with ISO compliant, multi-quadrant lighting options.
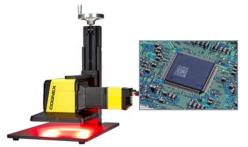
ISO Quality Standards:

- ISO/IEC 15415
- ISO/IEC 15416
- ISO/IEC 29158
- ISO/IEC 15426-1
- ISO/IEC 15426-2

Three models for a broad range of applications

Label

For flat printed codes
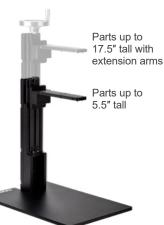
Direct Part Mark (DPM)

30-, 45-, and 90-degree lighting angles to properly illuminate a wide variety of substrates, including paper and some curved surfaces

High Definition (HD)

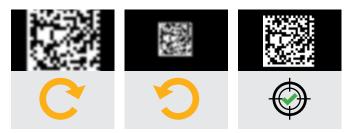Capable of verifying minuscule codes as small as 1 mil in size

Stand accessory adjusts to small and large parts

- The adjustable stand is compatible with all models.
- Parts of varying size and shape can be quickly and easily positioned for verification.
- Optional extension arms allow larger parts to fit under the verifier.

Parts up to 17.5″ tall with extension arms

Parts up to 5.5″ tall

Easily focus for accurate verification results

The Focus Feedback software tool instructs users how to adjust the height of the stand to properly focus the verifier. Visual confirmation is given when the code is in focus, so users never have to second guess the accuracy of their verifier.

Verification software provides clear and easy to read results

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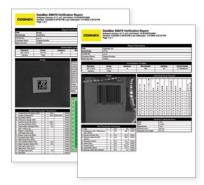
Whether using for real-time diagnostics, archiving results for traceability and compliance, or aggregating for statistical process analysis, the DataMan 475VS provides the flexibility and wealth of data to meet your code quality assurance needs.

Overall grade

Individual quality parameter grades

Pre-loaded application standards

Real time trend analysis

Adjustable grade trend threshold alerts

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

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

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

Selecting the right DataMan 475VS model

	475VS-LABEL	475VS-DPM	475VS-HD
Codes printed onto paper, plastic, or matte surfaces	✓	✓	✓
Codes larger than 33 mm wide	✓		
Codes as small as 3.5 mil		✓	✓
Codes as small as 1.0 mil			✓
DPMs (dot peen, laser-etched codes)		✓	✓
Codes printed on curved or textured surfaces		✓	✓
Codes printed on shiny reflective surfaces		✓	✓

Choosing between verification methods

An ideal application for offline verification is batch sampling of barcodes to monitor quality, which helps to prevent costly reprints and waste. Companies also use sample testing as proof of code quality when an item leaves or arrives at manufacturing facilities. All companies producing or with barcodes can benefit by having at least one ISO-compliant verifier. Inline verification options are also available and can be used independently or in combination with offline options. The 475VS offline models can be increased to the inline 475V verification speed at any time with a simple software feature key upgrade.

	STANDARDS-BASED GRADING	OFFLINE VERIFICATION	INLINE VERIFICATION
What is it?	Verification software that grades the same parameters with the same algorithms and calibration as a verifier, without the fixed lighting. Monitors code quality but is not ISO-compliant.	Portable barcode verifier that spot checks individual parts for batch sampling. Provides ISO-compliant reports proving the level code quality when leaving or arriving facilities.	Barcode verifier that is installed on a production line to verify 100% of codes. Provides ISO-compliant grading to meet industry standards.
Speed	Application dependent	1D and 2D: 4 seconds/code*	1D: 20 codes/second* 2D: 10 codes/second*
When to use	▪ ISO-compliant verification is not required or possible ▪ Code or part size does not fit verifier specifications ▪ Helps ensure downstream code readability and gives early warning of decreased mark quality	▪ ISO-compliant verification is required ▪ Codes or parts are inconsistently placed on the manufacturing line, or parts are variable in shape or size ▪ Batch sampling is OK ▪ Portability is needed	▪ ISO-compliant verification is required or mandated by law ▪ Codes or parts are consistently placed on the manufacturing line and do not have much variation ▪ Proof of code quality level is necessary ▪ To calibrate or monitor marking machines

*Code symbology, size, placement, part substrate, and marking type all affect the verification speed.

To learn more about these code quality monitoring options, visit **www.cognex.com/barcode-verifiers**

SPECIFICATIONS

	DataMan 475VS-Label	DataMan 475VS-DPM	DataMan 475VS-HD
Lighting Types	660 nm, 45°, 4-quadrant	660 nm, 45°, 4-quadrant 660 nm, 30°, 1-quadrant, 2 quadrant, 4-quadrant 660 nm, 90°	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	1D: UPC/EAN, Code 128, Code 39 2D: Data Matrix (ECC 200), QR Code, Micro QR Code	1D: UPC/EAN, Code 128, Code 39 2D: Data Matrix (ECC 200), QR Code, Micro QR Code
Field of View	80 x 60 mm	35 x 29 mm	11 x 9 mm
Working Distance	60 mm	41 mm with side lighting attachment 71 mm without side lighting attachment	41 mm with side lighting attachment 71 mm without side lighting attachment
Depth of Field (WD Tolerance)	±3 mm	5 mil codes: ±1.5 mm 15 mil codes: ±2.5 mm	1 mil codes: ±0.2 mm 4 mil codes: ±0.8 mm
Minimum X-Dimension	6 mil (0.15 mm)	3.75 mil (0.095 mm)	1 mil (0.025 mm)
Image Sensor	Sony IMX264LLR 5 MP (2448 x 2048 pixels) 2/3 inch CMOS, global shutter 8.5 mm x 7.1 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)	75 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 — Verifier	945 g	1002.7 g	2245 g
Weight — Stand	6191.5g		
Dimensions — Verifier	185 x 185 x 175 mm	286 x 145 x 193 mm	360 x 145 x 193 mm
Dimensions — Stand	485.73 x 424 x 280 mm (638.13 x 424x 280 mm with extension arm)		
Environmental Protection	IP67	IP65	IP65
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 and 2D: 4 seconds/code*	2D: 4 seconds/code*	Application dependent
Maximum Linear Line Speed	3.6 ft/second (1.1 m/second)	4.6 ft/second (1.4 m/second)	Application dependent
Coplanarity Tolerance	±3° of coplanar	±2° of coplanar	±0.1° of coplanar

* Code symbology, size, placement, part substrate, and marking type all affect the verification speed.