



Nearly every product uses a 1D or 2D barcode to automate and simplify identification and data capture. The basic process in reading codes is to 1) illuminate the code, 2) locate the code, and 3) extract the data. Organizations must be able to read codes quickly and accurately for maximum efficiency and throughput.

Cognex image-based barcode readers decode 1D and 2D codes, from printed labels to the hardest to read direct part mark (DPM) codes, and deliver industry-leading read rates. Advanced technology, modular options, and easy setup helps reduce costs, optimize performance, increase throughput, and control traceability.

INDUSTRIES

Cognex provides solutions to nearly all manufacturing and logistics industry sectors, including:

- Aerospace
- Airport Baggage Handling
- Automotive
- Consumer Products
- Ecommerce Fulfillment
- Electronics
- Food and Beverage
- Pharmaceutical
- Retail Distribution

Fixed-Mount Barcode Readers



Handheld Barcode Readers



Barcode Verifiers



Mobile Solutions



PATENTED DECODING TECHNOLOGY AND IMAGE FORMATION TOOLS

Cognex products are optimized with patented decoding algorithms and advanced technologies to ensure continuously high read rates for the most difficult and degraded 1D and 2D codes.

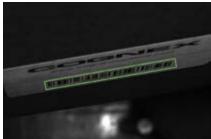




1DMax Algorithm with Hotbars Technology

1DMax® with Hotbars® is optimized for omnidirectional 1D barcode reading, decoding up to 10x the speed of a conventional barcode reader, even with increased noise, limited contrast, and damage.





	TYPICAL 1D ALGORITHM	HOTBARS IMAGE ANALYSIS
Noise		
Specular		
Perspective		
Quiet Zone		
Contrast		
Damage		





2DMax Algorithm with PowerGrid

2DMax® with PowerGrid® is a breakthrough 2D decoding algorithm and technology designed to read 2D codes (including Data Matrix and QR codes) with significant damage to or complete elimination of a code's finder pattern, clocking pattern, or quiet zone.







No finder pattern



No finder or clocking pattern



Quiet zone violation



Stripe



High Dynamic Range (HDR) Technology

HDR imaging uses the latest CMOS image sensor technology, which is 16x more detailed than conventional sensors, to globally enhance image quality and contrast.



HDR+

HDR+ further increases localized contrast changes automatically.

This creates a more uniformed image in a single acquisition allowing greater depth-of-field, faster line speeds, and improved handling of difficult codes. Target Source



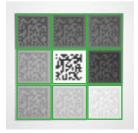
Conventional Sensor











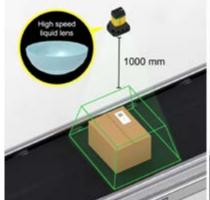
HDR+ technology enables reading an increased range of codes than is possible with conventional or other HDR technologies.

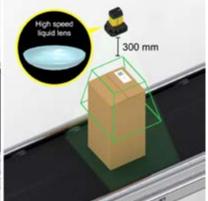


Liquid Lens Technology

This dynamic autofocusing technology automatically

adapts to changes in working distances for presentation scanning and high-speed, high-variability applications. Available in 8, 10, 16, 24, and 35mm lenses.

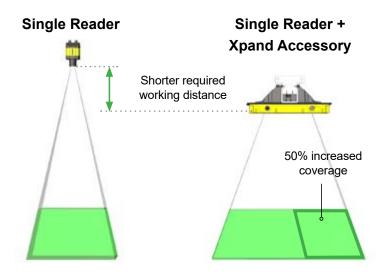






Greater coverage with fewer readers

The Xpand[™] technology accessory is available to increase the field-of-view coverage of a single barcode reader by over 50%. This enables wider belt coverage using fewer readers, simplifying setup and installation, and reducing overall cost.



MODULAR DESIGN FOR MAXIMUM FLEXIBILITY

Cognex offers modular software and hardware options to solve a wide range of barcode reading challenges. This flexibility enables fast, easy integration into your existing infrastructure, while providing a solution that allows you to adapt as your needs change.



EASY SETUP, OPERATION, AND MAINTENANCE

Cognex Edge Intelligence

Cognex Edge Intelligence (EI) technology transforms big data into smart data to improve overall equipment effectiveness and throughput. EI allows users to configure multiple devices at once and begin trending important system performance measurements within minutes. Users can be alerted when issues occur, and operators can identify root causes faster and resolve them sooner using powerful analytics and image view tools.





Performance dashboards, read rate trends, setup, commissioning, and calibration tools

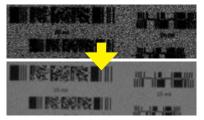


DataMan Setup Tool

The DataMan® Setup Tool software simplifies installation and operation of Cognex barcode readers. It provides step-by-step guidance, auto-adjusts and optimizes variable parameters, and captures code images in real-time for user review.



Step-by-step visual guidance



Pre- and post-image optimization tools

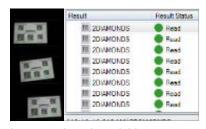


Image and read result history



DataMan fixed-mount, image-based barcode readers offer advanced technology, processing power, modularity, and ease of use for challenging manufacturing and logistics applications.

DataMan 470 Series

Premium reader with multi-core processing power and advanced imaging technology for complex, high-throughput 1D and 2D code applications.

POWER







RESOLUTION







CONNECTIVITY































SYMBOLOGIES











DataMan 580 Fixed-Mount Barcode Reader for Tunnel Applications

Enables greater throughput while maintaining high read-rates and short gaps between packages on high-speed lines utilizing a 9 MP imager and Cognex's 1D/2D QuickSort™ algorithm.



DataMan 370 Series

Delivers superior read performance for the broadest range of applications, including multi-code, multi-symbology applications.



*Including integrated light. Base dimensions are 73 mm (L) x 54 mm (W) x 42 mm (H)

POWER

RESOLUTION















FEATURES











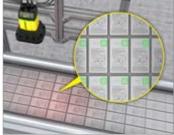












DataMan 280 Series

Premium decoding technology in a compact form factor.























FEATURES

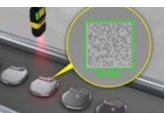


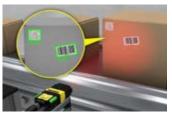


















DataMan 70 Series

Compact design ideal for reading 1D and 2D label-based codes in tight application spaces.

POWER

RESOLUTION 1.2 MP





CONNECTIVITY









FEATURES











FIXED-MOUNT READER SPECIFICATIONS & FEATURES

		70 Series	150 Series	260 Series	280 Series	370 Series	470 Series
= 1	Resolution		1280 x 960	1	1440 x 1080 1920 x 1080		x 1536 x 2048
11/4	Processing Power ¹	1.7X	2	2X	4X	5X	7.5X
QXS	Model Variants	L, QL, S, Q	QL, §	S, Q, X	L, QL, S, Q, X	L, Q, QL, X	L, Q, QL, X
Lense	s						
	Liquid Lens		✓	✓		✓	✓
-	High Speed Liquid Lens				✓	✓	✓
6	C-mount	✓	✓	✓	✓	\checkmark	✓
6	S-mount	✓	✓	✓	✓		
Symb	ologies						
	1D	✓	✓	✓	✓	\checkmark	✓
	2D	✓	✓	√	✓	✓	√
KQ	Multi-code	✓	✓	√	✓	✓	√
Decod	ling Algorithms						
HÖTBARS	1DMax with Hotbars	✓	✓	✓	✓	\checkmark	✓
	2DMax		√	✓	✓	✓	√
	PowerGrid		✓	√	✓	✓	√
Techn	ologies						
	Multi-Reader Sync			√	✓	\checkmark	✓
HDR	HDR				✓	✓	✓
HDR+	HDR+						✓
A-F	Standards-Based Grading				✓	✓	✓

		70 Series	150 Series	260 Series	280 Series	370 Series	470 Series
Lightir	ng Modularity						
Ŷ	Integrated Lighting	✓	✓	✓	✓	✓	✓
Ģ	External Lighting				√	✓	√
Ä	High Powered Integrated Torch (HPIT)				✓	✓	✓
Comm	unications						_
⇄	Discrete I/O	1/1	2/2	2/4	2/2, 2 user- configurable inputs/outputs	2/2, 2 user- configurable inputs/outputs	2/2, 2 user- configurable inputs/outputs
· 	Serial	\checkmark	✓	✓	✓	✓	✓
	Ethernet			✓	√	✓	√
G₩	Gigabit Ethernet				√	✓	✓
•=	USB	USB-C	USB		USB-C		
Additio	onal Features						
	High Speed Steerable Mirror (HSSM)						✓
	Web HMI Capable				√	√	✓
	Edge Intelligence			✓	✓	✓	✓
* +	Modular	✓	✓	✓	✓	✓	√
	Laser Aimer				280: LED 282: Laser	✓	√
/	IP Rating	IP65	IP65	IP65	IP67	IP67	IP67
(a)	ESD-Safe Housing ²	√	✓	✓	√	✓	√
4	SD Card					✓	✓



¹ Processing Power

The processing power of a reader is measured by how quickly it decodes a barcode and outputs the resulting data. A comparison test simulating a complex 1D/2D multi-code application (consisting of four varied 1D codes and seven varied 2D codes together) was used to determine the processing power of each DataMan fixed-mount barcode reader.



² ESD-Safe Housing

Protects devices and flammable environments from electrostatic discharge (ESD), the sudden flow of static electricity between two objects.

HANDHELD BARCODE READERS



Powered by patented technology, DataMan handheld barcode readers offer rugged housing and modular communication options for your toughest applications.



DataMan 8700DX

Offers cutting-edge performance and operator feedback on the toughest DPM and label-based codes while withstanding harsh oils, dirt, and water.

RESOLUTION









FEATURES









SYMBOLOGIES















DataMan 8700DQ

Decodes well-marked DPM codes with IP67-rated housing and an OLED display screen for easy setup and use.

DataMan 8700LX

Decodes well-marked 1D and 2D label-based codes, with an OLED display screen for easy setup and use.

DataMan 8700HD

Decodes well-marked 1D and 2D label-based codes as small as 2 mil in size.

RESOLUTION



1.6 MP

















SYMBOLOGIES







FEATURES









HANDHELD READER SPECIFICATIONS & FEATURES

		8700HD	8700HD 8700LX		8700DX
	Resolution	1.6 MP	1.6 MP	1.6 MP	1.6 MP
Lense	s				
	Liquid Lens				✓
Symb	ologies				
	1D	√	✓	✓	✓
200	2D	√	✓	✓	✓
Minim	um 1D/2D code size	2 mil / 2 mil	4 mil / 5 mil	3 mil / 5 mil	3 mil / 5 mil
	ling Algorithms				
HOTBARS	1DMax with Hotbars	✓	✓	✓	✓
	2DMax	✓	✓	✓	✓
10	PowerGrid	✓	✓	✓	✓
	ologies				
HDR	HDR	✓	✓	✓	✓
Lighti	ng Modularity				
(Ô,	Integrated Lighting	Red diffuse	Red direct lighting	White diffuse lighting	Red diffuse, polarized, and direct lighting
Comn	nunications				
÷	Wi-Fi	✓	✓	✓	✓
—	Ethernet with Industrial Protocols	✓	✓	✓	✓
	Serial	\checkmark	✓	✓	✓
• [USB	✓	√	√	✓
*	Bluetooth	✓	✓	✓	✓
Additi	onal Features				
OLED	OLED Display Screen	✓	✓	✓	✓
*	Modular	✓	✓	✓	✓
\Diamond	Drop Test	Multiple drops from 2.5 meters			
%	IP Rating	Handheld reader: IP67; Base station: IP65			

BARCODE VERIFIERS

Barcode verification is the process of grading the quality of barcodes to globally accepted standards. Cognex barcode verification technology ensures the readability and compliance of codes and provides detailed summary reports.

DataMan 475V Series Inline Verifier

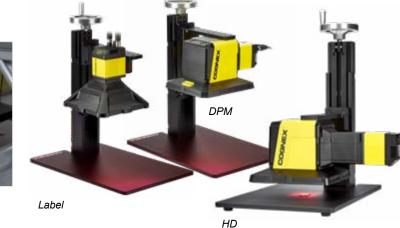
Grades 1D, 2D, and DPM codes from a fixed position on the production line.

DataMan 475VS Series Offline Verifier

Grades 1D, 2D, and DPM codes as small as 1 mil in size on a wide range of parts with an easy-to-use adjustable height stand.







Label and DPM models

In-Sight 7905V Series Verifier

Combines powerful vision and verification technology to perform multiple tasks at once including grading barcode quality, reading text, and verifying code placement on parts.







Inline and offline label and DPM models.



DataMan 8072V Series Handheld Verifier

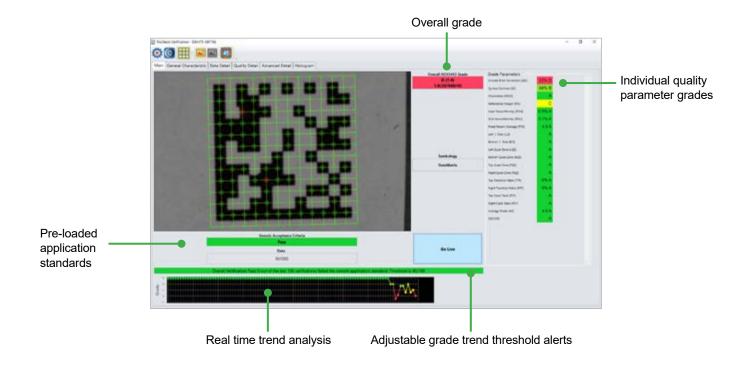
Grades the most difficult direct part mark (DPM) codes with 30/45/90-degree angle lighting options.





Auto-generate code quality data and reports

Barcode verification software provides visual diagnostic information to identify one-off or trending code quality issues. Export the data or transfer raw data to your own database for further analysis.



BARCODE VERIFIER SPECIFICATIONS & FEATURES

		DataMan 8072V	DataMan 475V Inline	DataMan 475VS Offline	In-Sight 7905V	
QXS	Model Variants	Standard, HD	Label, DPM	Label, DPM, HD	Label, DPM	
	Resolution	1.2 MP	5 MP	5 MP	5 MP	
	Field of View	Standard: 27 x 20 mm HD: 17 x 13 mm	Label: 80 x 60 mm DPM: 35 x 29 mm	Label: 80 x 60 mm DPM: 35 x 29 mm, HD: 11 x 9 mm	Label: 80 x 60 mm DPM: 35 x 29 mm	
	Minimum X-Dimension	Standard: 6.0 mil HD: 3.5 mil	Label: 6.0 mil DPM: 3.75 mil	Label: 6.0 mil DPM: 3.75 mil HD: 1 mil	Label: 6.0 mil DPM: 3.75 mil	
Q	OCR and code dimensioning tools				✓	
Symbo	ologies					
	1D		✓	✓	✓	
	2D	✓	✓	✓	✓	
	DPM	✓	✓	✓	✓	
Lighti	ng Modularity					
30°	30-degree	✓	DPM	DPM, HD	DPM	
45°	45-degree	✓	Label, DPM	Label, DPM, HD	Label, DPM	
90°	90-degree	✓	DPM	DPM, HD	DPM	
Additi	onal Features					
/ ₀	IP Rating	IP65	IP65	IP65	N/A	
	Industry Standards Compliance	ISO/IEC 15415, ISO/IEC TR 29158, ISO/IEC 15426-2	ISO/IEC 15415, ISO/IEC 15416, ISO/IEC TR 29158, ISO/IEC 15426-1, ISO/IEC 15426-2			
常	Applications Standards	GS1, MIL-STD 130 IUD, UDI, HIBCC, ISO 15434	GS1, MIL-STD 130 IUD, UDI, HIBCC, ISO 15434, Russian Crypto-Code, Custom Application Standards			



Do more with your smartphones and tablets by putting them to work across your entire enterprise, from in-house retail and light industrial barcode reading applications to harsher warehouse and factory floor environments. Cognex offers comprehensive, endto-end handheld mobile scanning solutions, while achieving best-in-class 1D, 2D, and DPM barcode reading performance.

Cognex Mobile Barcode Software Development Kit (SDK)

Whether developing a barcode reading application for inventory management, package delivery, patient ID scanning, vehicle inspection, or warehouse and factory floor environments, the Cognex Mobile Barcode Software Development Kit (SDK) provides enterprise-grade barcode scanning in a unified solution. The SDK can be used with any smartphone or tablet with a built-in camera, and even embedded systems.







MODELS AND SYMBO

Regardless of symbology, size, quality, printing method, or surface, Cognex has a barcode reader that can read your code, ensuring maximum efficiency and traceability.

Model	Reads		
L	Fixed position 1D barcodes		
QL	Omnidirectional 1D barcodes		
S	Slow or indexed well-marked 1D and 2D codes		
DQ/Q	High-speed or tough 1D and 2D codes		
DX/X	Challenging 1D and 2D codes, including DPM codes		
UHD	Ultra-small, well-marked 2D DPM codes (0.7 mil)		
HD	Small 1D and 2D codes (6-10 mil)		
HDX	Smaller 1D and 2D codes (2-5 mil)		
SR	Codes from standard range		
ER	Codes from extended-range (very high shelves)		
XR	Codes on hanging signs or ceilings		
UV	Ultraviolet (invisible) codes		
V	Verifies or grades the quality of codes		

1D Codes

UPC/EAN/JAN



Codabar

Code 11

Code 93





Code 25









2D Codes

Data Matrix



QR



Micro QR



PDF417



MicroPDF



Aztec Code



DotCode

Postal Codes

POSTNET



PLANET, Australian Post, Japan Post, Royal Mail, UPU

Intelligent Mail Barcode



THE GLOBAL LEADER IN MACHINE VISION AND BARCODE READING

For over 40 years, Cognex has helped the world's most innovative companies make their manufacturing and distribution faster, smarter, and more efficient.

Cognex vision systems and barcode readers help customers improve product quality and operational performance by eliminating defects, verifying assembly, and tracking information at every stage of the production process. Using data captured by Cognex vision systems and barcode readers, companies can monitor, update, and change production plans in real-time across global supply chains.

Smarter automation using Cognex products means fewer errors, which equates to lower costs and higher customer satisfaction. And Cognex is constantly applying new techniques, like artificial intelligence, to enable companies to evolve their automation strategy to meet today's and tomorrow's needs.

With a wide range of solutions and a large network of global vision experts, Cognex makes it possible to **Build Your Vision.™**

\$1 BILLION

2022 REVENUE

OVER 42
YEARS IN THE BUSINESS

500+
CHANNEL PARTNERS

GLOBAL OFFICES IN 20+ COUNTRIES

4,000,000+
SYSTEMS SHIPPED



BUILD YOUR VISION

Vision Systems

Automate inspection tasks, from defect detection to assembly verification and text reading, with easy to deploy vision systems.

www.cognex.com/machine-vision









Barcode Readers

Track and trace, from the floor to dock door, with powerful readers and verifiers designed to handle any code type.

www.cognex.com/barcodereaders









Industry Solutions

Solve applications across a wide range of industries with flexible and reliable machine vision and barcode reading solutions.

www.cognex.com/solutions











Main:

1st Kifisias str 56532 Thessaloniki, GR T: +30 2310672436 Branch:
11th Meropis str
10441 Athens, GR
T: +30 2105157861

email: contact@robovision.gr | url: www.robovision.gr