

# FIXED-MOUNT AND HANDHELD BARCODE READERS



THE LEADER IN MACHINE VISION & INDUSTRIAL ID

**COGNEX**

# THE GLOBAL LEADER IN INDUSTRIAL ID

Cognex® is the world's most trusted vision company, with over 1,000,000 systems installed in facilities around the world, and over thirty years of experience focused solely on machine vision and image-based industrial ID technology. Cognex products are used by many of the world's top manufacturers, suppliers and machine builders to ensure that the products that are being made meet the stringent quality requirements for each industry.

Cognex vision technology helps companies improve their manufacturing quality and performance by eliminating defects, verifying assembly and tracking and capturing information at every stage of the production process. Smarter automation using Cognex vision and ID systems means fewer production errors, which equates to lower manufacturing costs and higher customer satisfaction. Cognex offers the widest range of solutions to meet every application.

GLOBAL OFFICES  
**20**  
COUNTRIES



1,000,000+  
**SHIPPED** SYSTEMS



500+  
CHANNEL PARTNERS



30+ YEARS  
IN THE BUSINESS

## THE MOST COMPLETE PRODUCT RANGE



FIXED-MOUNT READERS

HANDHELD READERS

# COGNEX BARCODE READERS: ANY CODE, EVERY TIME

You need reliable barcode readers and, simply put, we read more codes and deliver the highest read rates—that's why people choose Cognex. When you can put a stop to no-reads by deploying the DataMan® family of image-based barcode readers, you can achieve your Automatic Identification (Auto ID) goals:

- Increase efficiencies—aid inventory management, quantify process bottlenecks and improvements, handle supplier printing variations, and reduce WIP (work in process)
- Achieve higher throughput—less manual resorting, faster read times, and reduced downtime
- Reduce costs—reduce scrap from rework of rejects
- Maintain customer satisfaction—avoid incorrect deliveries and recalls
- Control traceability—product quality information, improved asset tracking, allergen management, and part authentication deters counterfeiting

Regardless of the barcode symbology, size, quality, printing method or surface the codes are marked on, we can read it with the highest read rates!

- Print variations—(color, poor print, scratched, or washed out barcode print)
- Marking types—(ink jet, dot peen, laser etch, or direct part marking type)
- Surface types—(glass, metal, cardboard, ceramic, or plastic barcode surfaces)

Cognex has the product versatility and most advanced technology to help you meet your goals whether your application uses 1-D linear barcodes or higher density 2-D matrix codes:



## 1-D Low Speed

Slow moving or stationary 1-D barcodes printed on parts or packaging.



## 2-D Printed

Codes on labels and packaging. Moving or stationary, these can include a mix of 1-D and 2-D codes.



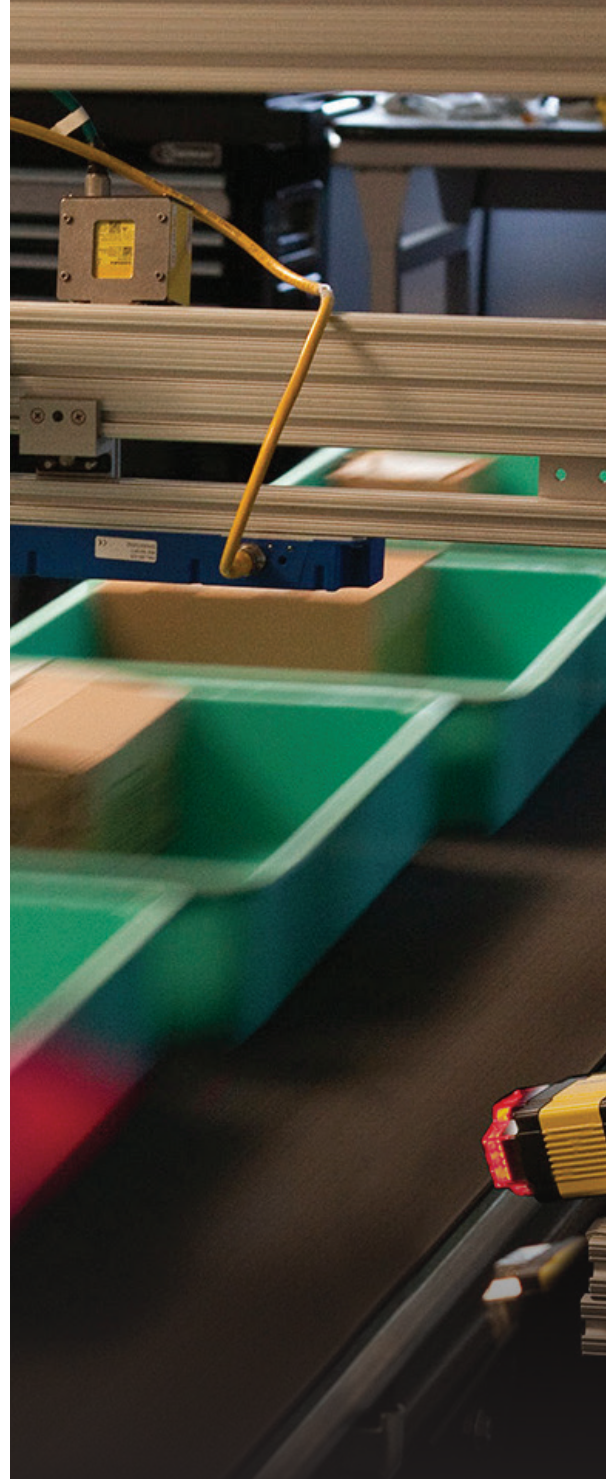
## 1-D High Speed

Fast moving 1-D barcodes printed on parts or packaging.



## 2-D Direct Part Mark

Dot peen, etched or laser marked 2-D Data Matrix codes marked directly on parts.



***“THANKS TO THE COMPREHENSIVE NATURE OF THE COGNEX SOLUTION AND TO THEIR PARTNER NETWORK, WE HAVE A HIGH PERFORMANCE, COST-EFFECTIVE SOLUTION AT OUR DISPOSAL.”***

STEPHAN LAVAL, MANAGER  
PRODUCTION METHODS BORG WARNER

**CALL NORTH AMERICA COGNEX SALES:  
844-BARCODE (844-227-2633)**

# COGNEX DELIVERS THE HIGHEST READ RATES

## Powerful Decoding Software Algorithms

DataMan barcode readers are optimized with patented algorithms for the highest read rates (99.9%) in the most challenging DPM (Direct Part Mark) and label-based identification applications.

Laser scanners cannot provide the high read rates you require for today's manufacturing environments. Other advantages over laser scanner technology include:

- Omnidirectional code reading
- Multiple code reading
- Extreme perspective code reading
- Damaged, poorly printed or barcodes with quiet zone violations

## The #1 Benchmark for Ranking ID Reader Performance

Read rate is the number of barcodes read divided by the number attempted. It's usually expressed as a percentage and the closer to 100%, the better.

- Read rate is a measure of process reliability and robustness
- No-reads can cost money, time and effort to remedy
- The higher the read rate, the higher the throughput

## For 1-D Linear Barcodes

1DMax+, the best-in-class 1-D barcode algorithm reads the most difficult-to-read barcodes. When paired with Hotbars® technology, 1DMax+ reads codes even faster.

## For 2-D Matrix Codes

2DMax®+, a breakthrough in 2-D decoding software, handles a wide range of degradations to the appearance of 2-D DPM codes, no matter what the cause or surface.



## WE CAN READ IT: ALL YOUR TOUGHEST CODES

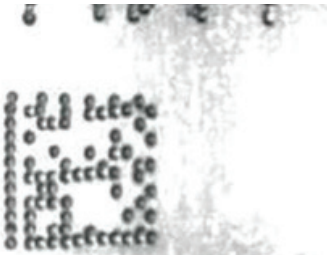


Textured background

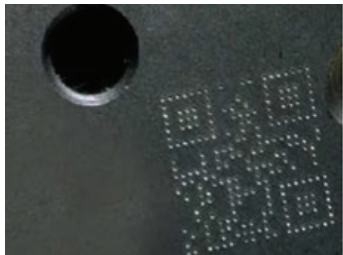


Reflective





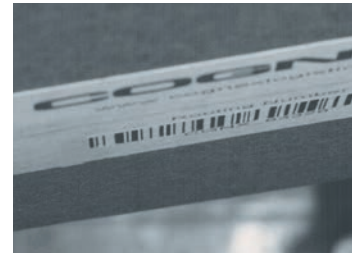
Poorly marked



Small cells



Badly printed



Extreme perspective



Scratched



Specularity



Warped



Plastic wrapped

### Supported Symbolologies

1-D: UPC/EAN/JAN, Codabar, Interleaved 2 of 5, Code 39, Code 128, Code 93, Pharmacode, GS1 DataBar  
Postal Codes: POSTNET, PLANET Code, Australia 4-State, Japan 4-State, UPU 4-State, Intelligent Mail Barcode  
2-D: Data Matrix, MaxiCode, Aztec, QR Code and MicroQR Code. Optional: VeriCode®  
Composite: GS1 (CC-A, CC-B), PDF417, MicroPDF

# COGNEX TECHNOLOGIES

IF YOU CAN'T SEE THE CODE, YOU CAN'T READ IT

## Advanced Algorithms and Patented Technologies



### HotBars® Technology

In a pioneering new way of reading 1-D linear barcodes,

Cognex has developed Hotbars image analysis technology. Hotbars combines superior signal fidelity with lightning speed, giving the next generation of Cognex DataMan readers unprecedented performance.

### Xpand™

With patent pending Xpand technology, the field-of-view for a single DataMan 300 or DataMan 503 can be increased by more than 50% enabling applications to be solved using fewer readers, which simplifies project installation and setup time and reduces overall cost.

### 2DMax®+

For 2-D codes, Cognex's 2DMax+ technology is best-in-class for decoding 2-D matrix symbologies as adopted in many industries for direct part marking (DPM) as well as for high speed printed applications.

## Flexible Optics

Each DataMan fixed-mount reader provides a variety of lensing options for maximum depth-of-field flexibility. The DataMan 8600 series of handheld readers offers integrated variable focus liquid lens technology as standard—a worldwide first!

- 3 different focal positions for optimum depth of field coverage
- S-Mount (M12) Lens: options for increased zoom range for high speed motion
- C and CS-Mount Lens: Field of View (FOV) flexibility or one reader to adjust to any distance
- Liquid Lens Variable Focus: a non-mechanical lens for greater focal range when part positions and sizes vary

## Flexible Illumination

Modular lighting, custom accessories and integrated illumination technology provide optimal lighting for all mark types and surfaces.

- Dark field illumination for dot peen and laser DPM
- Diffuse off-axis illumination for curved surfaces and highly reflective surfaces
- Quadrant control for machined surfaces
- Diffuse bright field illumination for labels and marks with strong contrast
- Handheld UltraLight® technology for superior image formation on the widest variety of surfaces, and using the widest range of marking methods



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Communications settings include Cognex Connect integration tools

Intelligent tuning automatically adjusts the lighting banks to optimize the image for reading DPM codes on various parts

Easy to adjust lighting and camera settings include trigger modes and focus

Image with overlay graphics

Easy to access Q&A help section

Results and data history log



# EASY DEPLOYMENT AND OPERATION

## Industrial Ethernet and Modular Communications for Maximum Flexibility

The DataMan series of industrial barcode readers are the first handheld readers to offer Ethernet communication with Cognex Connect™ capability for easy integration into your factory network for real-time product and part traceability. Another first for the DataMan series of handheld readers is the modularity of the communication. The DataMan 8050 and 8600 series field interchangeable communication modules enable the additional benefit of standardization on one reader platform in corded or cordless models.


Cognex Connect provides the most flexibility for communicating via Industrial Protocols such as EtherNet/IP, PROFINET, SLMP (Seamless Message Protocol), Modbus TCP and more in addition to traditional support for USB and RS-232.


## See What the Reader Sees

DataMan barcode readers allow you to see what the barcode reader sees. You can review images of the barcodes being read live or setup the reader to transfer no read images via FTP for later review. This visualization feature enables you to diagnose no reads and rejects for process improvement.

## Common Setup Tool with Intelligent Tuning

Powerful software simplifies initial reader setup. DataMan software is a common platform across all models. The Setup Tool simplifies deployment by putting the most common controls in a single page, allowing the user to see how different options affect the reader in real time.

 **COGNEX EXPLORER** This unique utility provides a unified network view of all Cognex vision, ID and visualization systems, powerful yet simple maintenance tools, the ability to backup/restore or clone systems, upgrade firmware and much more. Designed for control and maintenance engineers, Cognex Explorer™ is very intuitive and requires no training to use.

 **COGNEX CONNECT** As a network device, DataMan ID readers can be accessed from any terminal connected to the network. DataMan readers are supported by the Cognex Connect suite of Industrial Ethernet protocols, such as EtherNet/IP (with Add-On-Profile), PROFINET, Modbus/TCP and MC Protocol for easy communication into the factory network.

# DATAMAN FIXED-MOUNT BARCODE READERS



scan the code or visit  
[www.cognex.com/id](http://www.cognex.com/id)



## DataMan 300 Series

The DataMan 300 series is the most versatile Cognex fixed-mount barcode reader offering multiple integrated lighting and lens options, an intelligent auto-tune feature, and multiple models and resolutions to select from.

## DataMan 503 Series

The DataMan 503 is the highest performing Cognex fixed-mount barcode reader for applications requiring high speed and large depth-of-field or field-of-view.



## DataMan 50 Series

The DataMan 50 series is the smallest Cognex fixed-mount reader measuring just 23.5mm x 27mm x 43.5mm. DataMan 50 features:

- IP65-rated housing
- Three-position adjustable lens
- Integrated lighting and LED aimer
- USB and RS-232 communications

## DataMan 100 Series

The DataMan 100 series is a standard fixed-mount reader featuring:

- Three-position adjustable lens and C-Mount lens options
- Integrated lighting and LED aimer
- Train and trigger button for ease of setup
- USB and RS-232 communications







## DataMan 200 Series

The DataMan 200 series is a flexible fixed-mount reader featuring:

- IP65-rated housing
- Integrated lighting and laser aimer
- Optional variable focus liquid lens technology so there is no need to manually adjust the focus
- Ethernet and RS-232 connectivity

## DataMan 60 Series

The DataMan 60 series is a compact fixed-mount reader that features:

- Integrated lighting and LED aimer
- Three-position adjustable lens
- Ethernet, USB and RS-232 communications



	2-D Barcode Reading				2-D & 1-D Barcode Reading		1-D Barcode Reading					
	Direct Part Mark (DPM)	High Speed	Slow Speed	Multiple Codes	Mixed Codes	Challenging Codes	Ultra Fast	High Speed	Slow Speed	Multiple Codes	Omnidirectional	Oriented
DataMan 300/302/303 X	■	■	■	■	■	■		■	■	■	■	■
DataMan 300/302/303 L								■	■	■		■
DataMan 503 X	■	■	■	■	■	■	■	■	■	■	■	■
DataMan 503 QL							■	■	■	■	■	■
DataMan 50/60 L								■	■	■		■
DataMan 50/60 S			■	■	■	■			■	■	■	■
DataMan 50/60 QL								■	■	■	■	■
DataMan 100/200 X	■	■	■	■	■	■		■	■	■	■	■
DataMan 100/200 Q		■	■	■	■	■		■	■	■	■	■
DataMan 100/200 QL								■	■	■	■	■

# DATAMAN HANDHELD BARCODE READERS



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[www.cognex.com/id](http://www.cognex.com/id)

Cognex DataMan industrial handheld barcode readers provide unmatched performance for Direct Part Marks (DPM) and label-based applications, where integration, ruggedness and the ability to read challenging marks quickly are essential to your success.

DataMan industrial handheld readers are available with field interchangeable communication modules, both corded and wireless. One reader can be configured to meet specific communication needs.



## DataMan 8050 Series

DataMan 8050 series of barcode readers are equipped with Cognex's world-class barcode reading algorithms and designed to withstand harsh factory floor conditions. The best-in-class algorithms decode 2-D DPM codes and even difficult to read label-based 1-D and 2-D codes quickly and easily. And, the flexible design ensures the DataMan 8050 series of readers are ready to meet ever changing communication needs.

- **High speed barcode reader:** Reads 1-D and 2-D codes with incredible speed every time even if the code is damaged, smudged, scuffed or poorly marked. And, at an economical price point.
- **Easy to use modular design:** Field interchangeable communication modules allow one reader to be configured to meet specific communication needs to support corded RS-232, USB, Ethernet and Bluetooth communication requirements.
- **Rugged industrial design:** Constructed to handle tough environments, industrial features include: lanyard hook for easy retractor mounting, bright centralized aimer for clear targeting, loud beeper and indicator lights provide operator feedback.

## Two Model Options

**DataMan 8050X** is designed to decode 2-D DPM codes and all 1-D and 2-D label-based codes.

**DataMan 8050** is designed to decode 1-D and 2-D label-based codes with the fastest speed.

## DataMan 750 Series

The DataMan 750 series is compact with an ergonomic design, includes adjustable optics and easily reads well-marked 1-D and 2-D codes on a variety of surfaces. The DataMan 750 series is ESD safe, has a built-in laser aimer for quick alignment and supports RS-232, USB and PS/2 communications.



## DataMan 8600 Series

DataMan 8600 series of image-based ID readers provide the world's most advanced barcode reading technology for decoding DPM, 2-D and 1-D codes of varying sizes, quality and marking or printing methods. These handheld DPM barcode readers are designed for the harshest factory floor environments. Equipped with an advanced imaging system and patented flexible lighting technology, the DataMan 8600 series of barcode readers decode the most challenging Direct Part Mark (DPM) barcodes on the widest variety of surfaces. And, the modular communication design supports Ethernet with Industrial Protocols as well as corded and wireless modules to ensure the DataMan 8600 series of readers are ready to meet extensive application communication requirements.

- **Industry-leading read performance:** Combines Cognex's two most powerful patented algorithms to decode virtually every type of code, every time, with unsurpassed read rates.
- **Advanced image formation:** Integrated liquid lens technology maximizes application and depth of field flexibility. Patented UltraLight® technology provides superior image formation on any mark type and surface. UltraLight illumination provides dark field, bright field and diffuse lighting all in one electronically controlled light.
- **Easy to use modular design:** Field interchangeable communication modules allow one reader to be configured to meet specific communication needs to support corded RS-232, USB, Ethernet and Bluetooth communication requirements.



The DataMan 8050 series and 8600 series wireless readers provide a long working range—up to 30m—with a large memory capacity for reading codes when offline or out of range. The base station is compatible with industry standard Ethernet, USB and RS-232 cables.

	Challenging 2-D DPM Codes	2-D DPM Codes	Challenging 1-D/2-D Codes	Well Printed 1-D/2-D Codes	Wireless Bluetooth	ESD
DataMan 8600	■	■	■	■	■	
DataMan 8050X		■	■	■	■	
DataMan 8050			■	■	■	
DataMan 750			■	■		■
DataMan 750S				■		■

# HANDHELD READER SPECIFICATIONS

	750 S	750	8050	8050X	8600
1-D and Stacked Codes	Yes				
2-D Codes	Yes				
Decoding Algorithm	IDQuick/1DMax	2DMax/1DMax	IDQuick/ 1DMax+/Hotbars	2DMax/ 1DMax+/Hotbars	2DMax+/ 1DMax+/Hotbars
Image Resolution	752 x 480 global shutter		752 x 480 global shutter		1280 x 1024 global shutter
Lens Type	3-position (40/65/105mm) Adjustable		Fixed focus		Variable focus liquid lens (0 to over 500mm depending on code element size)
Trigger	Handle trigger, presentation				
Aimer	Laser (CDRH/IEC Class II)		Centralized LED aimer		Laser Aimer, Class 1 and Class 2
Status Outputs	LED, beeper and vibration		LED, beeper		LED, beeper and vibration
Lighting	Integrated bright field		Integrated LED with near/far optics		UltraLight integrated bright field, dark field, diffuse illumination
Communications	RS-232, USB and PS/2		Serial Module: RS-232, USB Ethernet Module: TCP/IP,FTP, Industrial Protocols: EtherNet/IP, PROFINET, MC Protocol, Modbus TCP Intelligent Base Station: RS-232, USB, Ethernet, Industrial Protocols Bluetooth module communicates to intelligent base station		
Wireless Option	No		Yes		
Power	5VDC		Serial/USB: 5V – 6V DC, 2.5W maximum LPS or NEC Class 2 power supply Ethernet: PoE Class 2 power supply Bluetooth: 3.7V, 3100 mAh Li-ion battery Intelligent Base Station: 24V, 13W maximum LPS or NEC Class 2 power supply		Serial/USB: 5V – 6V DC, 5.0W maximum LPS or NEC Class 2 power supply Ethernet: PoE Class 2 power supply Bluetooth: 3.7V, 3100 mAh Li-ion battery Intelligent Base Station: 24V, 13W maximum LPS or NEC Class 2 power supply
Material	Polycarbonate		Polycarbonate housing with overmold		
Weight	110g		279g		326g
Dimensions	151mm x 54mm x 49mm		210mm x 155mm x 85mm		220mm x 155mm x 85mm
Operating Temperature	0°C to 50°C (32°F to 122°F)		0°C to 40°C (32°F to 104°F)		
Storage Temperature	-10°C to 60°C (14°F to 140°F)		-40°C to 60°C (-40°F to 140°F)		
Operating and Storage Humidity	0% to 95%, non-condensing				
DoD UID Data Validation	No		Yes		
RoHS Certified	Yes				
Approvals (CE, UL, FCC)	Yes				
Operating System	Microsoft® Windows® XP and Windows 7 and Windows 8 32 bit and 64 bit				



# FIXED-MOUNT READER SPECIFICATIONS

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	300 L	300 X	302 L	302 X	303 L	303 X	503 QL	503 X
1-D and Stacked Codes	Yes							
Omnidirectional 1-D Codes	No	Yes	No	Yes	No	Yes		
Postal Codes	No	Yes	No	Yes	No	Yes	No	Yes
2-D Codes	No	Yes	No	Yes	No	Yes	No	Yes
Algorithm	1DMax+, Hotbars	1DMax+, Hotbars, IDQuick, 2DMax+	1DMax+, Hotbars	1DMax+, Hotbars, IDQuick, 2DMax+	1DMax+, Hotbars	1DMax+, Hotbars, IDQuick, 2DMax+	1DMax+, Hotbars	1DMax+, Hotbars, IDQuick, 2DMax+
Image Resolution	800 x 600 global shutter		1280 x 1024 global shutter		1600 x 1200 global shutter		2048 x 1088 global shutter	
Image Sensor	1/1.8" CMOS						2/3" CMOS	
Acquisition	Max 60 fps				Max 40 fps		Max 150 fps	
Decode Rate	Max 45/sec				Max 30/sec		120/sec	
Lens Options	C-Mount, S-Mount, variable focus liquid lens						C-Mount	
Trigger	Manual; External: single, burst and continuous; Internal: self and presentation							
Aimer	Dual laser (CDRH/IEC Class II)						None	
Discrete Inputs	2 opto-isolated						4 opto-isolated	
Discrete Outputs	4 opto-isolated							
Status Outputs	Beeper, 5 multifunctional LEDs, 10x LED bar array							
Lighting	Integrated segment-controlled bright field, external						High-powered illumination accessory, external	
Communications	Ethernet and RS-232							
Power	24VDC (±10%)							
Power Consumption	5W (internal lights), 18W (internal and external lights)						15W (DM503 only), 36W max (with HPIA)	
Material	Aluminum							
Weight	165g						1.5kg	
Dimensions	73mm x 54mm x 42mm, 92mm x 54mm x 42mm (w/cover and lights)						113mm x 88mm x 158mm (without lens or lens cover)	
Operating Temperature	0°C to 45°C (32°F to 113°F)							
Storage Temperature	-10°C to 60°C							
Operating and Storage Humidity	0% to 95%, non-condensing							
Protection	IP65							
RoHS Certified	Yes							
Approvals (CE, UL, FCC)	Yes							
Operating System	Microsoft® Windows® XP and Windows 7 32 and 64 bit							

## L Models

1DMax+ algorithm with Hotbars technology for reading the most challenging, high speed 1-D barcodes presented in fixed position, either horizontally or vertically.

## QL Models

Best-in-class 1-D barcode reading supported by 1DMax+ with Hotbars technology, which is optimized for ultra fast omnidirectional barcode reading.

## S Models

For slow-moving parts or index motion where parts have well-marked 1-D/2-D codes.

## X Models

In addition to 1DMax+ with Hotbars technology, X models also provide the highest-performance for applications that require reading 2-D codes.



# FIXED-MOUNT READER SPECIFICATIONS

	100 QL	100 Q	100 X	200 QL	200 Q	200 X
1-D and Stacked Codes	Yes					
2-D Codes	No	Yes		No	Yes	
Decoding Algorithm	1DMax	1DMax, IDQuick	1DMax, IDQuick, 2DMax+	1DMax	1DMax, IDQuick	1DMax, IDQuick, 2DMax+
Image Resolution	752 x 480 global shutter					
Acquisition	Max 60 fps					
Decode Rate	Max 45/sec					
Lens Options	3-position (40/65/105mm) adjustable. large aperture, SHD (super high density), C-Mount			3-position (40/65/105mm) adjustable, variable focus liquid lens, large aperture, C-Mount		
Trigger	Manual; External: single, burst and continuous; Internal: self and presentation					
Aimer	LED			Dual Laser (CDRH/IEC Class II)		
Discrete Inputs	2 opto-isolated					
Discrete Outputs	2 opto-isolated					
Status Outputs	Beeper and 1 multi-functional LEDs					
Lighting	Integrated bright field					
Communications	RS-232 and USB			Ethernet and RS-232		
Power	5VDC to 24VDC			36VDC to 57VDC (PoE)		
Power Consumption	500mA @ 5VDC max			50mA @ 48VDC max		
Material	Aluminum					
Weight	125g			75g		
Dimensions	55mm x 42mm x 22mm			64mm x 42mm x 21mm		
Operating Temperature	0°C to 40°C (32°F to 104°F)					
Storage Temperature	-10°C to 60°C (14°F to 140°F)					
Operating and Storage Humidity	0% to 95%, non-condensing					
Protection	IP65					
ESD Safe	Yes, with ESD safe cover					
DoD UID Data Validation	Yes					
RoHS Certified	Yes					
Approvals (CE, UL, FCC)	Yes					
Operating System	Microsoft® Windows® XP and Windows 7 32 and 64 bit					

## QL Models

Best-in-class 1-D barcode reading with 1DMax, which is optimized for omnidirectional barcode reading. QL models are field upgradable to the Q model.

## Q Models

High-performance code reading of 1-D/2-D codes on fast-moving parts. Includes 1DMax and IDQuick technologies.

## X Models

Highest-performance code reading for applications that require reading the most challenging DPM codes or 1-D/ 2-D codes.



# FIXED-MOUNT READER SPECIFICATIONS

CALL NORTH AMERICA COGNEX SALES: 844-BARCODE (844-227-2633)

	50 L	50 QL	50 S	60 L	60 QL	60 S
1-D and Stacked Codes	Yes, oriented	Yes, omnidirectional	Yes	Yes, oriented	Yes, omnidirectional	Yes
Omnidirectional 1-D Codes	No	Yes		No	Yes	
Postal Codes	No					
2-D Codes	No		Yes	No		Yes
Algorithm	1DMax+, Hotbars		1DMax+, Hotbars, IDQuick	1DMax+, Hotbars		1DMax+, Hotbars, IDQuick
Image Resolution	752 x 480 global shutter					
Image Sensor	1/3" CMOS					
Acquisition	Max 60fps					
Decode Rate	Max 45/sec		Max 5/sec	Max 45/sec		Max 5/sec
Lens Options	3-position (45/70/110mm) adjustable					
Trigger	Manual; External: single, burst and continuous; Internal: self and presentation		Manual; External: single Internal: self and presentation	Manual; External: single, burst and continuous; Internal: self and presentation		Manual; External: single Internal: self and presentation
Aimer	LED					
Discrete Inputs	2, non-isolated					
Discrete Outputs	3, non-isolated					
Status Outputs	3 multifunctional LEDs, (external control box with beeper and two buttons available)					
Lighting	Integrated bright field, external					
Communications	USB and RS-232			Ethernet, USB and RS-232		
Power	5VDC to 24VDC or USB Bus powered			5VDC to 24VDC		
Power Consumption	2.5W					
Material	Aluminum, Polycarbonate		Aluminum Housing \ Polycarbonate Window			
Weight	76g (w/cable)			100g (3.42 oz)		
Dimensions	23.5mm x 26.5mm x 45.4mm			55mm x 44.5mm x 23.5mm		
Operating Temperature	0°C to 40°C (32°F to 104°F)					
Storage Temperature	-10°C to 60°C					
Operating and Storage Humidity	0% to 95%, non-condensing					
Protection	IP65			IP40		
RoHS Certified	Yes					
Approvals (CE, UL, FCC)	Yes					
Operating System	Microsoft® Windows® XP and Windows 7 32 and 64 bit					

## S Models

For slow-moving parts or index motion where parts have well-marked 1-D/2-D codes.

## L Models

1DMax+ algorithm with Hotbars technology for reading the most challenging, high speed 1-D barcodes presented in fixed position, either horizontally or vertically.

## QL Models

Best-in-class 1-D barcode reading supported by 1DMax+ with Hotbars technology, which is optimized for ultra fast omnidirectional barcode reading.

## X Models

In addition to 1DMax+ with Hotbars technology, X models also provide the highest-performance for applications that require reading 2-D codes.



# SATISFIED CUSTOMERS

## Netflix

One of the most expensive processes at Netflix was the handling of DVD returns. Huge resources were tied up in manually opening mailers, taking out the sleeved discs, checking the titles on the DVDs against the sleeves, checking the discs for physical defects, cleaning them and scanning them into the system.

To improve production quality and reduce labor costs, Netflix implemented a system using DataMan barcode readers to read barcodes on the envelope, sleeve, and DVD disc. Since go-live, the project has exceeded expectations in all areas.

## Axel-Springer

Barcodes are used to pack the newspapers into bundles to make sure they not only arrived quickly but also at the right address. For three decades the barcodes were read using a laser scanner with a tilting mirror, but recently this mature technology was replaced by the next generation of barcode readers: DataMan.

The high performance DataMan readers made it possible to achieve 100 percent reliability in reading the barcodes after a test phase of just four weeks. And that was for newspaper bundles ranging in height from 0.5 to 10 inches and variations in the position of the code over a range of 15 inches plus.

## Borg Warner uses DataMan readers for turbocharger traceability

Borg Warner Turbo Systems implemented a project to mark each component to create seamless traceability through the production process and beyond. Even at high temperatures and at high volumes, DataMan readers were up to the task. Parts were scanned at each station with such ease and speed that the traceability project was able to achieve its goals as well as lower costs by increasing efficiencies and reducing rework and scrap.

## Beyonics moved to 2-D codes to save space and increase throughput

As electronics shrink in size, smaller printed circuit boards (PCBs) mean less space for labels, while the increasing demand for product traceability requires more information. Beyonics had to migrate to 2-D Data Matrix codes.

Beyonics' existing readers were in poor condition and could not read 2-D codes. The direct replacement was implemented without altering any existing software programming or hardware wiring configurations while achieving higher read rates and increasing production throughput by about 10%.

## COGNEX

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

Corporate Headquarters One Vision Drive Natick, MA 01760 USA Tel: +1 508 650 3000 Fax: +1 508 650 3344

### Americas

United States, East	+1 508 650 3000
United States, West	+1 650 969 8412
United States, South	+1 615 844 6158
United States, Detroit	+1 248 668 5100
United States, Chicago	+1 630 649 6300
Canada	+1 905 634 2726
Mexico	+52 81 5030 7258
Central America	+52 81 5030 7258
South America	+1 909 247 0445
Brazil	+55 47 8804 0140

### Europe

Austria	+43 1 23060 3430
Belgium	+32 2 8080 692
France	+33 1 4777 1550
Germany	+49 721 6639 0
Hungary	+36 1 501 0650
Ireland	+353 1 825 4420
Italy	+39 02 6747 1200
Netherlands	+31 208 080 377
Poland	+48 71 776 0752
Spain	+34 93 445 67 78
Sweden	+46 21 14 55 88

Switzerland	+41 71 313 06 05
Turkey	+90 212 306 3120
United Kingdom	+44 1327 856 040

### Asia

China	+86 21 5050 9922
India	+9120 4014 7840
Japan	+81 3 5977 5400
Korea	+82 2 539 9047
Singapore	+65 632 55 700
Taiwan	+886 3 578 0060

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