

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 one million systems installed in facilities around the world, and over thirty years of experience, Cognex is solely focused on machine vision and image-based industrial ID technology. Deployed by many of the world's top manufacturers, suppliers and machine builders, Cognex products ensure that manufactured items meet the stringent quality requirements of 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 most application requirements.

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
- Improve customer satisfaction—avoid incorrect deliveries and recalls
- Control traceability—track assets and product quality information, manage allergens and deter counterfeiting with accurate part authentication

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—inkjet, dot peen, laser etch or direct part mark (DPM) type
- Surface types—glass, metal, cardboard, ceramic or plastic barcode surfaces
- Damaged codes—including previously unreadable 2-D codes without visible perimeters

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

Moving or stationary 2-D codes on labels and packaging 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
BorgWarner

**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 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
- Visual feedback when no code is read (missing code, etc.)

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 II™ technology, 1DMax reads codes even faster and at lower resolutions.

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. PowerGrid™ technology brings 2-D code reading to a new level, being able to read codes without a finder or clocking patterns and no quiet zone.

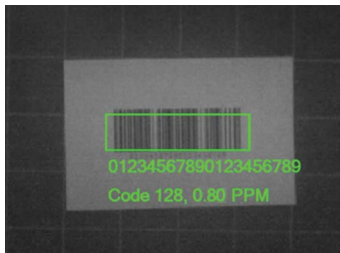


WE CAN READ ALL YOUR TOUGHEST CODES



PowerGrid technology dramatically increases read rates in 2-D barcode-reading applications where a part's geometry, poor lighting, occlusion or print-registration errors make it difficult to capture an image of the entire code. Unlike previous solutions, PowerGrid technology can locate and read codes even when they exhibit significant damage to or complete elimination of the finder pattern, clocking pattern or quiet zone.





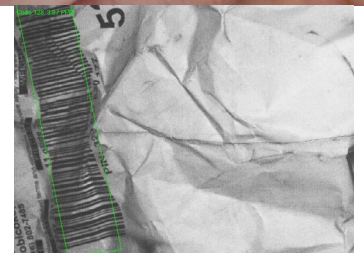
Low resolution



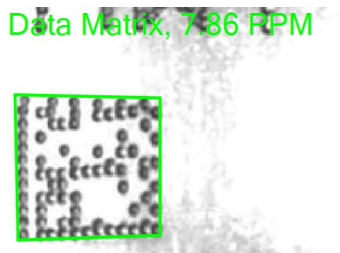
Missing perimeter features



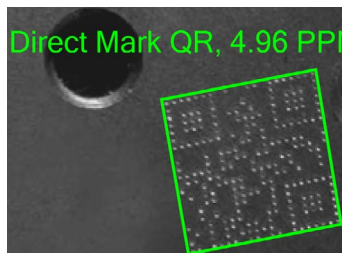
Specularity



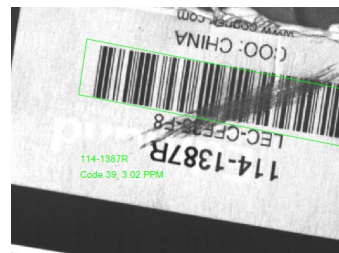
Warped



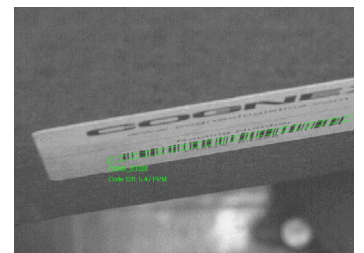
Poorly marked



Small modules



Scratched



Extreme perspective

Supported Symbolologies

1-D: UPC/EAN/JAN, Codabar, Interleaved 2 of 5, Code 39, Code 128, Code 93, Pharmacode, GS1 DataBar, MSI, Code 25

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®, DotCode

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 II Technology

In a pioneering new way of reading 1-D linear barcodes, Cognex has developed Hotbars II image analysis technology. Hotbars II combines superior signal fidelity with lightning speed, giving the next generation of Cognex DataMan readers unprecedented performance.

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 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. Options include fixed-focus and integrated liquid lenses that are easy to change in the field for maximum product versatility.

- 3 different focal positions for optimum depth of field coverage
- S-mount (M12) lens: options for increased zoom range and 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

Xpand

With patent-pending Xpand™ technology, the field-of-view for a single DataMan 300/360 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.

PowerGrid Technology

PowerGrid technology provides reliable reading of previously unreadable 2-D codes without visible perimeters, even when the codes exhibit significant damage to or complete elimination of the finder pattern, clocking pattern and quiet zone.

Flexible Illumination

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

- Handheld UltraLight® technology for superior image formation on the widest variety of surfaces, and using the widest range of marking methods
- 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
- Fixed-mount models offer integrated red, blue, white and IR lighting with diffused, polarized and unpolarized options



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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

Communications settings include Cognex Connect™ integration tools

Image with overlay graphics

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.



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.

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
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 SLMP for easy communication into the factory network.

DATAMAN FIXED-MOUNT BARCODE READERS



Scan the code or visit
www.cognex.com/id



DataMan 300/360 Series

The DataMan 300/360 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 260 Series

The full-featured DataMan 260 is ideal for reading 1-D linear barcodes, high-density 2-D matrix codes, or direct part mark (DPM) codes. It combines unprecedented performance, straight- and right-angle configurations, and integrated lighting, with liquid lens technology and Ethernet and RS-232 connectivity.



DataMan 150 Series

The DataMan 150 series full-featured, fixed-mount barcode readers offer USB and RS-232 communications with straight- and right-angle configurations. It also includes integrated lighting, modular optics, and liquid lens technology in a small, industrial-rated housing.



DataMan 60 Series

The DataMan 60 series is a compact, fixed-mount reader. It features integrated lighting and LED aimer, a three-position adjustable lens, and Ethernet, USB and RS-232 communications. The DataMan 60 delivers higher read rates than single-line or raster laser scanners and competitive image-based readers.



DataMan 50 Series

The DataMan 50 series is the smallest Cognex fixed-mount reader measuring just 23.5mm x 27mm x 43.5mm. Features include IP65-rated housing, three-position adjustable lens, integrated lighting and LED aimer, and USB and RS-232 communications. Proprietary 1DMax with Hotbars® technology offers the highest read rates on 1-D barcodes and IDQuick® provides the ability to read even the most difficult 2-D matrix codes.



	2-D Barcode Reading			1-D Barcode Reading				General	
	2DMax™ — Hard-To-Read DPM and Damaged 2-D Code Reading	IDQuick™ — Well Marked 2-D Code Reading		1DMax™ — Most Challenging and Damaged 1-D Code Reading (with Hotbars technology)			1-D Code Orientation		Multiple Codes/ Various Symbolologies
		High speed	Stopped/ slow speed	Ultra-fast speed	High speed	Stopped/ slow speed	Omnidirectional 360° code reading	horizontally or vertically aligned codes	
DataMan 503 X	●	■		▲			■		■
DataMan 503 QL				▲			■		■
DataMan 360/362/363 X	●	■			▲		■		■
DataMan 300/302/303 X	●	■			■		■		■
DataMan 360/362/363 QL					▲		■		■
DataMan 300/302/303 QL					■		■		■
DataMan 360/362/363 L					▲			■	■
DataMan 300/302/303 L					■			■	■
DataMan 150/152 X DataMan 260/262 X	●	■			▲		■		■
DataMan 150/152 Q DataMan 260/262 Q		■			▲		■		■
DataMan 150/152 QL DataMan 260/262 QL					▲		■		■
DataMan 150/152 S DataMan 260/262 S			■			■	■		■
DataMan 50/60 QL					■		■		■
DataMan 50/60 L					■			■	■
DataMan 50/60 S			■			■	■		■

■ Feature included

● PowerGrid available for reading most degraded 2-D codes without visible perimeters

▲ Hotbars II included for reading low resolution codes, intelligent image buffering, and stitching of separated codes

DATAMAN HANDHELD BARCODE READERS



Scan the code or visit
www.cognex.com/id

Cognex DataMan industrial handheld barcode readers provide unmatched performance for 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. 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, and Ethernet options, as well as cordless options including Bluetooth and Wi-Fi.
- 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 Handheld Verifiers

As the only compliant handheld verifier available on the market, the DataMan 8600V series verifiers offer superior ease-of-use and are highly cost effective. Using a handheld verifier, manufacturers can perform verification on the factory floor rather than at a remote or fixed verification station.



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. Equipped with an advanced imaging system and patented flexible lighting technology, the DataMan 8600 series of barcode readers decode the most challenging DPM barcodes on the widest variety of surfaces. These handheld DPM barcode readers are designed for the harshest factory floor environments. 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, and Ethernet options, as well as cordless options including Bluetooth and Wi-Fi.



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 and Wi-Fi
DataMan 8600	■	■	■	■	■
DataMan 8050X		■	■	■	■
DataMan 8050			■	■	■

HANDHELD READER SPECIFICATIONS

	8050	8050X	8600
1-D and Stacked Codes	Yes		
2-D Codes	Yes		
Decoding Algorithm	IDQuick/ 1DMax/Hotbars	2DMax/ 1DMax/Hotbars	2DMax/ 1DMax/Hotbars
Image Resolution	752 x 480 global shutter		1280 x 1024 global shutter
Lens Type	Fixed focus		Variable focus liquid lens (0 to over 500mm depending on code element size)
Trigger	Handle trigger, presentation		
Aimer	Centralized LED aimer		Laser aimer, Class 1 and Class 2
Status Outputs	LED, beeper		LED, beeper and vibration
Lighting	Integrated LED with near/far optics		UltraLight integrated bright field, dark field, diffuse illumination
Communications	Serial Module: RS-232, USB Ethernet Module: TCP/IP, FTP, Industrial Protocols: EtherNet/IP, PROFINET, SLMP, Modbus TCP Intelligent Base Station: RS-232, USB, Ethernet, Industrial Protocols Bluetooth module communicates to intelligent Bluetooth base station Wi-Fi module communicates to intelligent Wi-Fi base station		
Wireless Option	Yes		
Power	Serial/USB: 5V – 6V DC, 2.5W maximum LPS or NEC Class 2 power supply Ethernet: PoE Class 2 power supply Cordless: 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 Cordless: 3.7V, 3100 mAh Li-ion battery Intelligent Base Station: 24V, 13W maximum LPS or NEC Class 2 power supply
Material	Polycarbonate housing with overmold		
Weight	279g		326g
Dimensions	210mm x 155mm x 85mm		220mm x 155mm x 85mm
Operating Temperature	0°C to 40°C (32°F to 104°F)		
Storage Temperature	-40°C to 60°C (-40°F to 140°F)		
Operating and Storage Humidity	0% to 95%, non-condensing		
DoD UID Data Validation	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 360 L	300 QL 360 QL	300 X 360 X	302 L 362 L	302 QL 362 QL	302 X 362 X	303 L 363 L	303 QL 363 QL	303 X 363 X	503 QL	503 X
1-D and Stacked Codes	•	•	•	•	•	•	•	•	•	•	•
Omnidirectional 1-D Codes		•	•		•	•		•	•	•	•
Postal Codes			•			•			•		•
2-D Codes			•			•			•		•
Algorithm	1DMax, Hotbars II ¹		1DMax, Hotbars II ¹ , IDQuick, 2DMax ²	1DMax, Hotbars II ¹		1DMax, Hotbars II ¹ , IDQuick, 2DMax ²	1DMax, Hotbars II ¹		1DMax, Hotbars II ¹ , IDQuick, 2DMax ²	1DMax, Hotbars II ¹	1DMax, Hotbars II ¹ , IDQuick, 2DMax ²
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										
Other I/O Points	2 user-configurable ³										
Status Outputs	Beeper, 5 multifunctional LEDs, 10x LED bar array, 360 degree read indicator ³										
Memory Card	Micro SD memory card included ³										
Lighting	Integrated segment-controlled bright field, various controllable external light options, color options include red, red polarized, IR, blue, white										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										

¹ DataMan 36x models only. DataMan 30x models have Hotbars

² PowerGrid Available

³ DataMan 36x models only



FIXED-MOUNT READER SPECIFICATIONS

	150 S	150 QL	150 Q	150 X	152 S	152 QL	152 Q	152 X	260 S	260 QL	260 Q	260 X	262 S	262 QL	262 Q	262 X
1-D and Stacked Codes	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Omnidirectional 1-D Codes	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2-D Codes	•		•	•	•		•	•	•		•	•	•		•	•
Algorithms	1DMax IDQuick Hotbars	1DMax Hotbars II	1DMax IDQuick Hotbars II	1DMax 2DMax* Hotbars II	1DMax IDQuick Hotbars	1DMax Hotbars II	1DMax IDQuick Hotbars II	1DMax 2DMax* Hotbars II	1DMax IDQuick Hotbars	1DMax Hotbars II	1DMax IDQuick Hotbars II	1DMax 2DMax* Hotbars II	1DMax IDQuick Hotbars	1DMax Hotbars II	1DMax IDQuick Hotbars II	1DMax 2DMax* Hotbars II
Image Resolution	752 x 480 global shutter				1280 x 960 global shutter				752 x 480 global shutter				1280 x 960 global shutter			
Image Sensor	1/3" CMOS				1/3"CMOS				1/3"CMOS				1/3"CMOS			
Acquisition	2 fps	60 fps			2 fps	45 fps			2 fps	60 fps			2 fps	45 fps		
Max Decode Rate	2/sec	45/sec			2/sec	45/sec			2/sec	45/sec			2/sec	45/sec		
Lens Options	6.2 mm (3-position manual focus 40/65/105 mm, or liquid lens 50–200 mm [SD], 80–1000mm [LR]), 16 mm (manual focus, or liquid lens 80–1000 mm)															
Trigger and Tune Buttons	Yes. Quick Setup Intelligent Tuning															
Aimer	2 green aimer LEDs															
Discrete Inputs	2 opto-isolated								2 opto-isolated							
Discrete Outputs	2 opto-isolated								4 opto-isolated							
Status Outputs	5 status LEDs and beeper															
Lighting	Modular/Field Configurable Lighting: Four independently controled, high-power LEDs (red, white, blue, IR) Band-Pass Filters & Polarizing Filter Available															
Power	5–26 VDC, 2.5W (USB bus power option) DB-15 pig tail cable, pin compatible to DM100								Two models with 24V +/- 10% or PoE (Power over Ethernet)							
Power Consumption	<2.5 W (USB)								<3.0 W (PoE or external power)							
Communication	RS-232 and USB interface								RS-232 and Ethernet interface							
Material	Zinc															
Weight	128g								142g							
Dimensions	Straight: 43.1mm x 22.4mm x 55(63)mm Right-Angle: 43.1mm x 28.8(35.8) x 49.3mm								Straight: 43.1mm x 22.4mm x 64mm Right-Angle: 43.1 x 35.8mm x 49.3mm							
Operating Temperature	Temperature (operating) 0°C – +40°C															
Storage Temperature	Temperature (storage) -10°C – +60°C															
Operating and Storage Humidity	Humidity < 95% non-condensing															
Protection	IP-65															
RoHS Certified	Yes															
Approvals (CE, UL, FCC)	Yes															
Operating System	Microsoft® Windows® XP and Windows 7 32 and 64 bit															

*PowerGrid Available

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, omnidirectional	Yes, oriented	Yes, omnidirectional	Yes, omnidirectional
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 60 fps		Max 2 fps	Max 60 fps		Max 2 fps
Max Decode Rate	45/sec		2/sec	45/sec		2/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 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					

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 with 1DMax and Hotbars technology that is optimized for omnidirectional barcode reading.

S Models

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

Q Models

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

X Models

High-performance code reading for applications that require reading challenging 1-D and 2-D codes, including DPM codes. The X Model can also include patent pending PowerGrid technology to read codes without visible perimeters.

SATISFIED CUSTOMERS

Netflix speeds up DVD return

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 chose image-based readers for greater reliability

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 for Axel Springer® 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.

BorgWarner uses DataMan readers for turbocharger traceability

BorgWarner® 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.

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