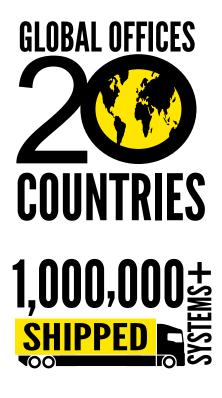


# THE GLOBAL LEADER IN INDUSTRIAL ID

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.

THE MOST COMPLETE











# 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.



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<sup>®</sup>, 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.



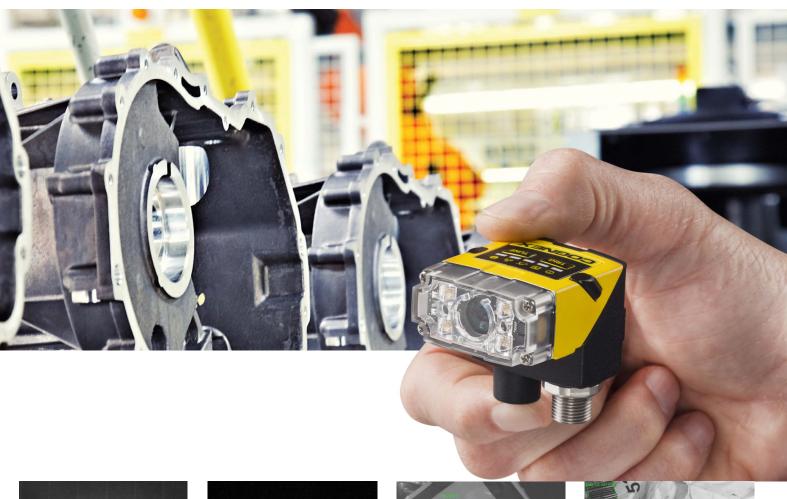
## WE CAN READ ALL YOUR TOUGHEST CODES





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.







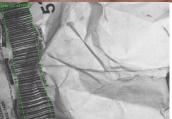
Low resolution



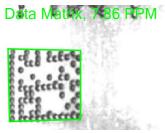
Missing perimeter features



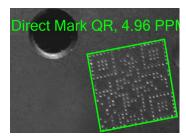
Specularity



Warped



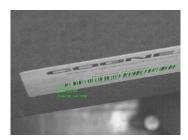
Poorly marked



Small modules



Scratched



Extreme perspective

#### **Supported Symbologies**

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





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 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** 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, higher-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 Ba		General						
	2DMax™ — Hard-To-Read DPM and Damaged 2-D Code Reading	IDQuick™ — Well Marked 2-D Code Reading		Most Challen Reading	1DMax™ — ging and Dama (with Hotbars te	ged 1-D Code chnology)	1-D Code	Multiple Codes/ Various Symbologies	
		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	•			<b>A</b>					
DataMan 503 QL				<b>A</b>			-		
DataMan 360/362/363 X	•				<b>A</b>		-		
DataMan 300/302/303 X	•						-		
DataMan 360/362/363 QL					<b>A</b>		-		
DataMan 300/302/303 QL									
DataMan 360/362/363 L					<b>A</b>			-	
DataMan 300/302/303 L									
DataMan 150/152 X DataMan 260/262 X	•				<b>A</b>				
DataMan 150/152 Q DataMan 260/262 Q					<b>A</b>		-		-
DataMan 150/152 QL DataMan 260/262 QL					<b>A</b>		-		
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

<sup>▲</sup> 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.



### **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 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.

#### **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 gl	752 x 480 global shutter 1280 x 1024 global shu							
Lens Type	Fixed	Variable focus liquid le Fixed focus (0 to over 500mm depending element size)							
Trigger		Handle trigger, presentation							
Aimer	Centralized	LED aimer	Laser aimer, Class 1 and Class 2						
Status Outputs	LED, b	eeper	LED, beeper and vibration						
Lighting	Integrated LED wi	UltraLight integrated bright field, dark field, diffuse illumination							
Communications	Intelliger Bluetoot	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	LPS or NEC Clas Ethernet: PoE Cla Cordless: 3.7V, 310( Intelligent Base Station	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							
Material		Polycarbonate housing with overmold							
Weight	27	9g	326g						
Dimensions	210mm x 155	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

	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		Max, bars II¹	1DMax,   Hotbars II¹,   1DMax,   Hotbars II¹,   IDQuick,   Hotbars II¹   IDQuick,   2DMax²   2DMax²			1DMax, Hotbars II¹, Hotbars II¹, IDQuick, 2DMax²		1DMax, Hotbars II <sup>1</sup>	1DMax, Hotbars II <sup>1</sup> , IDQuick, 2DMax <sup>2</sup>		
Image Resolution	800	x 600 global s	hutter	1280	x 1024 global s	hutter	1600	x 1200 global s	shutter	2048 x 1088 global sh	
Image Sensor					1/1.8" CMOS					2/3" (	CMOS
Acquisition			Max	60 fps				Max 40 fps		Max 1	50 fps
Decode Rate			Max	45/sec				Max 30/sec		120	/sec
Lens Options				C-mount, S-m	ount, variable f	ocus liquid lens	3			C-M	lount
Trigger						Manual; ngle, burst and i: self and prese					
Aimer	Dual laser (CDRH/IEC Class II)										one
Discrete Inputs	2 opto-isolated										isolated
Discrete Outputs						4 opto-isolated					
Other I/O Points				2	user-configurat	ole <sup>3</sup>					
Status Outputs			Ве	eper, 5 multifu	unctional LEDs,	10x LED bar a	rray, 360 deg	ree read indicat	or <sup>3</sup>		
Memory Card					Micro SD	memory card	included³				
Lighting		ntegrated segn	nent-controlled		arious controllat polarized, IR, b		t options, col	or options inclu	de		d illumination y, external
Communications					Eth	nernet and RS-	232				
Power						24VDC (±10%)					
Power Consumption			5W	(internal lights)	), 18W (internal	and external li	ghts)				503 only), (with HPIA)
Material						Aluminum					
Weight					165g					1.5	5kg
Dimensions			73mm x 54r	nm x 42mm, 9	2mm x 54mm x	42mm (w/ cove	er and lights)			113mm x 88 (without lens	mm x 158mm 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				Micro	osoft® Windows	s® XP and Wind	lows 7 32 and	64 bit			

<sup>&</sup>lt;sup>1</sup> DataMan 36x models only. DataMan 30x models have Hotbars



<sup>&</sup>lt;sup>2</sup> PowerGrid Available

<sup>&</sup>lt;sup>3</sup> 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 2DMax* Hotbars II	1DMax IDQuick Hotbars	1DMax Hotbars II		1DMax 2DMax* Hotbars II	1DMax IDQuick Hotbars	1DMax Hotbars I		1DMax 2DMax* Hotbars I	
Image Resolution	7:	52 x 480 g	lobal shutt	ter	12	80 x 960 g	global shut	ter	7	52 x 480 g	lobal shut	ter	12	280 x 960 g	global shu	tter	
Image Sensor		1/3" (	CMOS			1/3"0	CMOS			1/3"0	CMOS			1/3"0	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-po:	sition man	ual focus 4	10/65/105	mm, or liq	uid lens 50	–200 mm	[SD], 80-	1000mm [	LR]), 16 m	m (manua	l focus, or	liquid lens	80–1000	mm)	
Trigger and Tune Buttons		Yes. Quick Setup Intelligent Tuning															
Aimer								2 green a	imer LEDs	;							
Discrete Inputs				2 opto-	isolated							2 opto-	isolated				
Discrete Outputs				2 opto-	isolated				4 opto-isolated								
Status Outputs							5 s	tatus LED	s and bee	per							
Lighting			M	odular/Fie	ld Configu		ting: Four i and-Pass F					Os (red, wh	nite, blue,	IR)			
Power					SB bus po							dels with 2 (Power over					
Power Consumption				<2.5 V	/ (USB)						<3.0	W (PoE or	external	oower)			
Communication			RS	-232 and	USB interf	ace					RS-2	RS-232 and Ethernet interface					
Material								Zi	inc								
Weight				12	28g							14	12g				
Dimensions		Straight: 43.1mm x 22.4mm x 55(63)mm         Straight: 43.1mm x 22.4mm x 64mm           Right-Angle: 43.1nm x 28.8(35.8) x 49.3mm         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								Y	es								
Approvals (CE, UL, FCC)								Y	es								
Operating System						Microso	oft® Windo	ws® XP a	and Windo	ws 7 32 ar	nd 64 bit						

<sup>\*</sup>PowerGrid Available

## FIXED-MOUNT READER SPECIFICATIONS

	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	Y	es	No	Yes						
Postal Codes		No									
2-D Codes	N	Yes									
Algorithm	1DMax,	Hotbars	1DMax, Hotbars, IDQuick	1DMax,	Hotbars	1DMax, Hotbars, IDQuick					
Image Resolution			752 x 480 gl	lobal shutter							
Image Sensor			1/3" C	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 (45/70/1	110mm) adjustable							
Trigger	External: s and cor	nual; iingle, burst itinuous; nd presentation	Manual; External: single Internal: self and presentation	External: s and cor	nual; iingle, burst itinuous; nd presentation	Manual; External: single Internal: self and presentation					
Aimer			LE	ED							
Discrete Inputs			2, non-i	solated							
Discrete Outputs			3, non-i	solated							
Status Outputs		3 multifunctional	LEDs, (external control b	ox with beeper and two	buttons available)						
Lighting			Integrated brigh	nt field, external							
Communications		USB and RS-232		E	thernet, USB and RS-2	32					
Power	5VDC	to 24VDC or USB Bus p	owered		5VDC to 24VDC						
Power Consumption			2.5	5W							
Material			Aluminum Housing \ P	olycarbonate Window							
Weight		76g (w/cable)			100g (3.42 oz)						
Dimensions	23	3.5mm x 26.5mm x 45.4r	nm	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			Ye	es							
Approvals (CE, UL, FCC)			Ye	es							
Operating System		M	icrosoft® Windows® XP ar	nd 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%.

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

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