

DATAMAN 150/260 SERIES BARCODE READERS

For 1-D linear barcodes, printed higher-density 2-D matrix codes, and direct part mark (DPM) codes, the DataMan[®] 150/260 series fixed-mount, image-based ID readers deliver unprecedented performance, flexibility and ease of use.



Features at-a-glance

- High read rates
- Modular lighting, optics and configuration
- Easy to use
- No moving parts
- Performance feedback

Highest read rates

DataMan 150/260 series fixed-mount barcode readers achieve the highest possible read rates thanks to a high-speed, powerful platform that runs the latest Cognex algorithms.

1DMax[®] with Hotbars II™ technology decodes damaged or poorly printed 1-D barcodes as small as 0.8 pixels per module (PPM). 2DMax[®] provides reliable 2-D code reading independent of code quality, printing method, or the surface that the codes are marked on, and with patent-pending PowerGrid™ technology, can locate and read 2-D codes that exhibit significant damage to or complete elimination of the finder pattern, clocking pattern, or quiet zone.













1DMax with Hotbars II technology deliver high-speed reading of damaged or poorly printed 1-D barcodes as small as 0.8 pixels per module (ppm).

2DMax with PowerGrid technology provides reliable reading of challenging 2-D codes, including 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.

Simplify installation in tight spaces

DataMan 150/260 series models offer straight or right-angled configurations to fit into the tightest spaces. In-line and ninety degree configurations eliminate the need for equipment redesign, and complicated optical paths with mirrors.

Reduce installation time and cost of ownership

Modular lighting and optics make it easy to change DataMan 150 and 260 series reader lenses and lighting in the field. This not only reduces installation time and resources, but protects the ID reader investment by making it easy to optimize performance for each application and accommodate future process changes.

For example, if the surface finish of the part or the background material warrants a new light wavelength to optimize image formation, just change the on-board lighting instead of buying a new barcode reader. Likewise, if the reader must be moved further away from the code, just change from a standard 6.2 mm lens to a 16 mm lens. There is also an option to have autofocus capability by installing a liquid lens for both 6.2 mm and 16 mm focal lengths.

Easy to use tune and trigger buttons

The Tune and Trigger buttons allow for the setup of the application all without a PC or HMI. After mounting the reader, simply press the Tune button. Whether the code is label based or a DPM code, the tuning algorithm trains the code and automatically adjusts the optics and lighting to deliver an image optimized for your application.

Once the reader has been tuned, the trigger button makes it easy to confirm that the reader has been set up properly. Audible beep or visual LED feedback makes it easy to know when the code is correctly read.

Tune and Trigger Buttons





Perfect for DataMan 100/200 series retrofits

The DataMan 150/260 series readers utilize the same mounting configuration and pin out as the DataMan 100/200 series ID readers. This provides easy retrofits into existing DataMan 100/200 applications without adapter plates, or changes to mounting holes and wiring.

Because DataMan 150/260 and 100/200 models have equal standoff distances and fields of view, retrofits require no changes to the machine layout, hardware or application.

Compatibility for easy retrofits

DataMan 150/260 series communications, field of view, mounting holes and pin out are compatible with the DataMan 100/200 series readers.



DataMan 150/260 Series Barcode Readers

Optimal image formation for any code

Codes on round, shiny, highly reflective, or specular surfaces very often require custom illumination to allow them to be read reliably. Low resolution codes and codes at long working distances also present reading challenges. Cognex's modular technology makes reading these codes simple.

16 mm lens—compared to the standard 6.2 mm lens, this lens can read smaller codes and codes at further working distances.

Liquid lens technology—the liquid lens module gives you the ability to perform autofocus with no moving parts.

High-powered Integrated Light (HPL)—four high-powered red LEDs direct more light onto the code for better image formation. This feature is particularly useful for long distance code reading and high speed applications.

Half-polarized front cover—2 polarized LEDs and 2

unpolarized LEDs can be configured for custom lighting for any application. The polarized LEDs are ideal for shiny, specular surfaces, while the unpolarized LEDS are for long distance and high speed applications. Fully polarized and un-polarized front covers are also available, and can be easily interchanged.

By simply pressing the Tune button on the reader, the reader automatically optimizes the lighting levels, focus, and lighting scheme for best image formation.



MODELS

_		2-D Barcode	& 1-D Reading	1-D Barcode Reading							
	Direct Part Mark (DPM)	High Speed	Slow Speed	Multiple Codes	Mixed Codes	Challenging Codes	High Speed	Slow Speed	Multiple Codes	Omnidirec tional	Oriented
DataMan 150/152 QL 260/262 QL								•	•		
DataMan 150/152 S 260/262 S			•	•	•	•		•	•	•	
DataMan 150/152 Q 260/262 Q			•	•	•		•	•		•	
DataMan 150/152 X 260/262 X				•	•			•			

QL Models

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

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 ID Quick™ technologies.

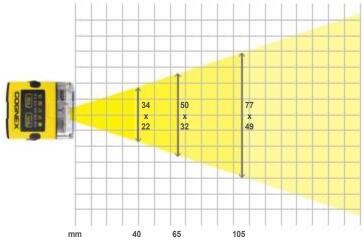
X Models

High-performance code reading for applications that require reading challenging 1-D and 2-D codes, including Direct Part Mark (DPM) codes. X Models can also include patent pending PowerGrid™ technology to read codes without visible perimeters.

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Field of View and Reading Distances

DataMan 150/260 with 6.2 mm lens



Reading distances

	@40	@65	@105
1D	30 mil 45–90 mm * 15 mil 45–70 mm 6 mil 28–51 mm	30 mil 45–170 mm * 15 mil 45–103 mm * 6 mil 45–82 mm	15 mil 45–170mm * 6 mil 70–120 mm
2D	30 mil 25–95 mm 15 mil 20–70 mm 10 mil 25–60 mm 5 mil 40–50 mm	30 mil 25–160 mm 15 mil 35–120 mm 10 mil 45–100 mm	30 mil 25–265 mm 15 mil 55–200mm 10 mil 75–160 mm

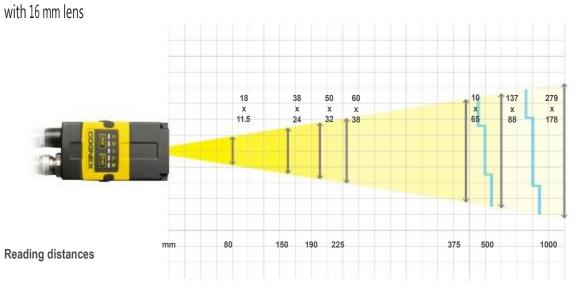
* min. Distance limited by code size

Dataman 150/260



DataMan barcode reader quick setup app

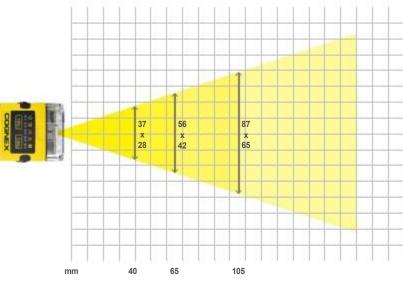
This convenient web-based app allows you to remotely set up and configure your networked Ethernet-based fixed-mount barcode readers on your phone or mobile device. Available from Google Play or iTunes App Store, this app allows you to see images in real-time, adjust and share configuration settings among multiple readers, save and send images, and much more. You can even troubleshoot issues and check read rates anywhere on your factory or distribution center floor without using a PC.



DataMan 1	50/260 Se	@80		@150	@190		@225		@375		@500			@1000
1D	30 mil 15 mil 6 mil	60–100 mm 70–90 mm 78–82 mm	30 mil 15 mil 6 mil	110–190 mm 130–165 mm 145–155 mm	30 mil 15 mil 6 mil	130–245 mm 165–215 mm 185–200 mm	30 mil 15 mil 6 mil	155–290 mm 190–260 mm 215–235 mm	30 mil 15 mil 6 mil	255–490 mm 325–430 mm 373–377 mm	30 mil 15 mil	340–650 mm 425–575 mm	30 mil	700–1250 mm
2D	30 mil 15 mil 6 mil	60–100 mm 75–85 mm 78–82 mm	30 mil 15 mil 6 mil	115–185 mm 140–160 mm 148–152 mm	30 mil 15 mil 6 mil	140–235 mm 170–210 mm 185–195 mm	30 mil 15 mil 6 mil	170–275 mm 200–250 mm 223–227 mm	30 mil 15 mil	280–470 mm 335–415 mm	30 mil 15 mil	370–625 mm 450–515 mm	30 mil	800–1150 mm

Field of View and Reading Distances

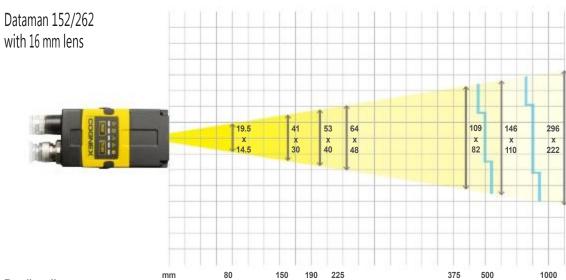




Reading distances

		@40		@65		@105			
1D	30 mil	45–90 mm	30 mil	45–110 mm	30 mil	50–175 mm			
	15 mil	45–65 mm	15 mil	45–105 mm	15 mil	45–165 mm			
	12 mil	20–60 mm	12 mil	35–95 mm	12 mil	60–150 mm			
	10 mil	25–55 mm	10 mil	40–90 mm	10 mil	65–145 mm			
	8 mil	30–50 mm	8 mil	45–85 mm	8 mil	75–135 mm			
	6 mil	35–45 mm	6 mil	50–75 mm	6 mil	85–125 mm			

		@40		@65	@105			
2D	30 mil	25–95 mm	30 mil	50–100 mm	30 mil	50–175 mm		
	15 mil	25–53 mm	15 mil	45–85 mm	15 mil	75–135 mm		
	12 mil	28–50 mm	12 mil	50–80 mm	12 mil	80–130 mm		
	10 mil	30–48 mm	10 mil	55–75 mm	10 mil	85–125 mm		
	8 mil	32–45 mm	8 mil	58–72 mm	8 mil	90–120 mm		
	6 mil	35–42 mm	6 mil	60–70 mm	6 mil	95–115 mm		



Reading distances

	@80	@150	@190	@225	@375	@500	@1000
1D	30 mil 55–105 mm 15 mil 70–90 mm 6 mil 78–85 mm	30 mil 105–195 mm 15 mil 130–170 mm 6 mil 142–158 mm	30 mil 130–250 mm 15 mil 160–218 mm 6 mil 180–198 mm	30 mil 152–295 mm 15 mil 190–260 mm 6 mil 212–235 mm	30 mil 250–490 mm 15 mil 320–435 mm 6 mil 355–395 mm	30 mil 335–660 mm 15 mil 420–580 mm 6 mil 475–525 mm	30 mil 670–1300 mm 15 mil 900–1100 mm
2D	30 mil 60–100 mm 15 mil 75–87 mm 6 mil 78–82 mm	30 mil 112–188 mm 15 mil 135–165 mm 6 mil 145–155 mm	30 mil 140–238 mm 15 mil 168–210 mm 6 mil 182–198 mm	30 mil 165–280 mm 15 mil 198–252 mm 6 mil 215–230 mm	30 mil 275–475 mm 15 mil 330–420 mm	30 mil 370–630 mm 15 mil 440–560 mm	30 mil 775–1200 mm

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	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		•		•								•			٠		
2-D Codes	•		•	•	•		•	•	•		•	•			•	•	
Algorithms	1DMax IDQuick	1DMax	1DMax IDQuick	1DMax 2DMax*	1DMax IDQuick	1DMax	1DMax IDQuick	1DMax 2DMax*	1DMax IDQuick	1DMax	1DMax IDQuick	1DMax 2DMax*	1DMax IDQuick	1DMax	IDQuick	1DMax 2DMax	
Image Resolution	752	x 480 Glob	al shutter		12	80 x 960 G	lobal shut	ter	75	2 x 480 G	lobal shutt	er	12	280 x 960 G	Blobal shutt	er	
Image Sensor		1/3" CM	OS			1/3"C	MOS			1/3"C	MOS			1/3"0	CMOS		
Acquisition		60 fps	5			45	fps			60	fps			45	fps		
Max Decode Rate	2/ Second	45 D	2/ Second	45 D	ecodes/Se	cond	2/ Second	45 D	ecodes/Se	cond	2/ 45 Decodes/Second Second			cond			
Lens Options		6.2 mm (3 position or liquid lens, 50250 mm), 16 mm (manual focus or liquid lens, 80 mm 1 m)															
Trigger and Tune Buttons		Yes. Quick Setup Intelligent Tuning															
Aimer		2 Green Aimer LEDs															
Discrete Inputs			2	opto-isola	ted							2 opto-	isolated				
Discrete Outputs			2	opto-isola	ted				4 opto-isolated								
Status Outputs							5 Status	LEDs and I	Beeper								
Lighting			Modula	r/Field Cor	nfigurable L				troled, High larizing Filt			White, Blue	e, IR)				
Power			26 VDC, 2.5 B-15 pig tail			. ,)		Two models with 24V +/- 10% or PoE (Power over Ethernet)								
Power Consumption			<	2.5 W (US	B)				<3.0 W (PoE or external power)								
Communication			RS-232	and USB	Interface				RS-232 and Ethernet Interface								
Material								Aluminum									
Weight				128 g					142 g								
Dimensions			night - 43.1 i ght-Angle -			,	1		Straight - 43.1 mm x 22.4 mm x 64 mm Right-Angle - 43.1 x 35.8 mm x 49.3 mm								
Operating Temperature						Tem	perature (c	perating) (°C – +40°C	;							
Storage Temperature						Tem	perature (s	torage) -10	°C – +60°C								
Operating and Storage Humidity							•	Humidity 95% non-	condensing	I							
Protection								IP-65									
RoHS Certified								Yes									
Approvals (CE, UL, FCC)	Europ	Yes USA FCC Part 15, Class A Canada ICES-003 European Community EN55022:2006 +A1:2007, Class A, EN55024:1998 +A1:2001 +A2: 2003, EN60950								Australia C-TICK, AS/NZS CISPR 22 / EN 55022 for Class A Equipmen t Japan J55022, Class A KCC Safety: IEC 60950-1:2005 (2nd Edition); Am 1:2009							

Operating System
*PowerGrid Available

Contact:

Windows 7 (32/64-bit) or Windows XP (32/64-bit)