

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).

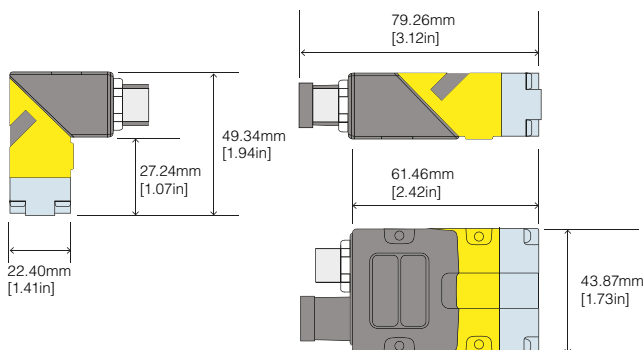
2DMax with PowerGrid technology provides reliable reading of challenging 2-D codes, including previously unreadable 2-D codes without visible perimeters, even when the codes exhibit significant damage to or complete elimination of the finder pattern, clocking pattern, and quiet zone.

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.



The serial USB-based DataMan 150 series and Ethernet-based 260 series models deliver unprecedented performance, flexibility, and ease-of-use.



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



Auto-tune and trigger buttons make the readers easy to set up without a PC.

Field Exchangeable Illumination & Optics



Field exchangeable lighting and optics readily adapt to changing factory conditions and application requirements.

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.

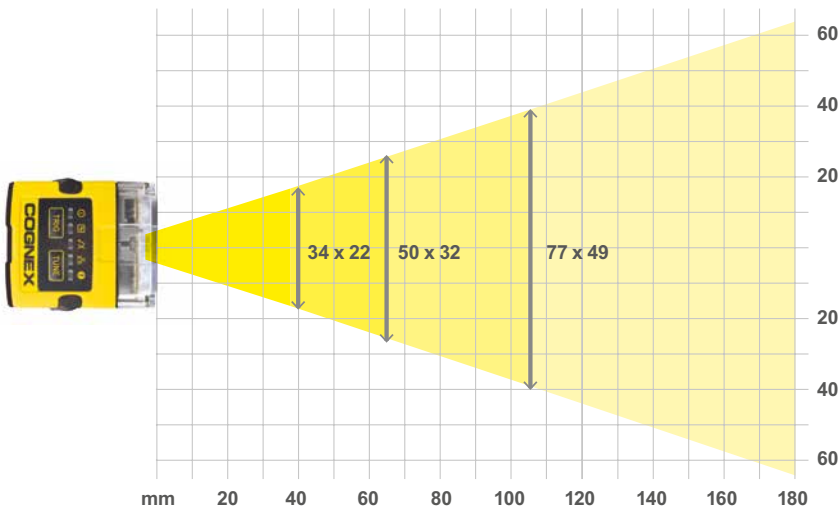
Because DataMan 150/260 and 100/200 models have equal standoff distances and fields of view, retrofits require no changes to the machine layout, hardware or application.

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.



Field of View and Reading Distances



Reading distances @ 40

1D 30mil 45 - 90 mm *
15mil 45 - 70 mm
6mil 28 - 51 mm

2D 30mil 25 - 95 mm
15mil 20 - 70 mm
10mil 25 - 60 mm
5mil 40 - 50 mm

Reading distances @ 105

1D 30mil 45 - 225 mm *
15mil 45 - 170 mm *
6mil 70 - 120 mm

2D 30mil 25 - 265 mm
15mil 55 - 200 mm
10mil 75 - 160 mm

Reading distances @ 65

1D 30mil 45 - 170 mm *
15mil 45 - 103 mm *
6mil 45 - 82 mm

2D 30mil 25 - 160 mm
15mil 35 - 120 mm
10mil 45 - 100 mm

* min. Distance limited by code size

MODELS

| | 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 | High Speed | Slow Speed | Multiple Codes | Omnidirectional | 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.

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 | 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 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 | 60 fps | | | | 45 fps | | | | 60 fps | | | | 45 fps | | | |
| Max Decode Rate | 2/ Second | 45 Decodes/Second | | | 2/ Second | 45 Decodes/Second | | | 2/ Second | 45 Decodes/Second | | | 2/ Second | 45 Decodes/Second | | |
| Lens Options | 6.2 mm (3 position or liquid lens, 50..250 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-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 Controlled, 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 | 128 g | | | | | | | | 142 g | | | | | | | |
| 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) | 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 | Windows 7 (32/64-bit) or Windows XP (32/64-bit) | | | | | | | | | | | | | | | |

*PowerGrid Available

COGNEX

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

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