COGNEX

DATAMAN 360 SERIES IMAGE-BASED BARCODE READERS

When high-performance, flexibility and ease of use are essential for your ID Code reading application, the DataMan® 360 series delivers. The DataMan 360 series reads a wide range of 1-D linear and 2-D matrix symbologies. Powerful ImageMax technology with a high powered liquid lens and a high-powered illumination enhances image formation and maximizes read rates for even the most challenging dot-peen or laser marked DPM codes.

Advanced algorithms for reliable 1-D code reading

1DMax® is a 1-D barcode reading algorithm optimized for omnidirectional barcode reading. Hotbars® II technology locates, extracts and decodes low-resolution 1-D barcodes quickly and accurately. Combining these two powerful technologies offers extraordinary read rates at very high speeds.

Combining texture and shape for best-in-class 2-D code reading

2DMax® provides reliable 2-D code reading despite code quality, printing method or the surface that the codes are marked on. Patent pending PowerGrid™ technology locates and reads 2-D codes that exhibit significant damage to or complete elimination of the finder pattern, clocking pattern, or quiet zone. These combined technologies provide increased read rates and decoding robustness for the most difficult and degraded codes.

Features at-a-glance

❯ 1DMax with Hotbars II technology enables high-speed reading of low-resolution and damaged or poorly printed 1-D barcodes.

❯ 2DMax and PowerGrid technology reliably reads challenging 2-D codes, including previously unreadable 2-D codes without visible perimeters.

❯ Field changeable optics and lighting, including ImageMax technology, provides enhanced image formation. Flexible illumination and optics allows for reading of codes at varying working distances.

❯ Auto-tune and trigger buttons simplify reader set up and configuration without a PC.
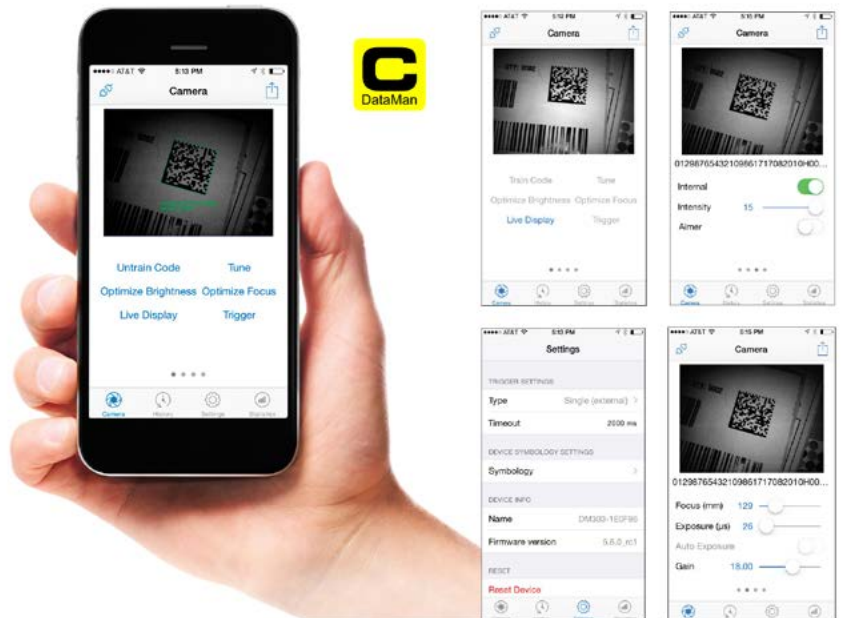
Optimal image formation of any code in any environment

ImageMax technology is specifically designed to read challenging DPM codes on a variety of round, reflective or specular surfaces using a combination of cross polarized and co-linear polarized LEDs and a high powered lens with liquid lens technology. ImageMax technology auto-focuses to read small codes at variable working distances and provides even illumination to reliably read hard to read DPM codes. The one-piece, ESD-safe metal housing simplifies installation and prevents equipment damage.

360° ring light provides visual pass/fail results

Tune and trigger buttons expedites set up and configuration

Micro SD card allows for system-level back up and convenient unit restoration and replacement

Optional polarized or fully-non-polarized front covers enhance image formation

Auto-focus liquid lens technology accommodates varying working distances

ESD-safe metal housing simplifies installation

High-power integrated light (HPIL) creates evenly-illuminated, high-contrast images

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 360 SERIES SPECIFICATIONS

	DataMan 360 L[1]	DataMan 360 QL[2]	DataMan 360 Q[3]	DataMan 360 X[4]	DataMan 362 L[1]	DataMan 362 QL[2]	DataMan 362 Q[3]	DataMan 362 X[4]	DataMan 363 L[1]	DataMan 363 QL[2]	DataMan 363 Q[3]	DataMan 363 X[4]
1-D and Stacked Codes	•	•	•	•	•	•	•	•	•	•	•	•
Omnidirectional 1-D Codes		•	•	•		•	•	•		•	•	•
Postal Codes				•				•				•
2-D Codes			•	•			•	•			•	•
Algorithms	1DMax	1DMax	1DMax, 2DMax		1DMax	1DMax	1DMax, 2DMax		1DMax	1DMax	1DMax, 2DMax	
Image Resolution	800 x 600 pixels				1280 x 1024 pixels				1600 x 1200 pixels			
Image Sensor	1/1.8" CMOS											
Acquisition	Max 60 fps								Max 40 fps			
Decode Rate	Max 45/sec								Max 30/sec			
Lens Options	C-Mount, S-Mount, variable focus liquid lens											
Trigger	External: single, burst and continuous; Internal: self and presentation											
Aimer	Dual laser (CDRH/IEC Class II)											
Discrete Inputs	2 opto-isolated											
Discrete Outputs	4 opto-isolated											
Other I/O Points	2 user-configurable											
Status Outputs	Beeper, 5 multifunctional LEDs, 10x LED bar array, 360 indicator											
Lighting	Integrated segment-controlled bright field, various controllable external light options, color options include red, red polarized, IR, blue, white and the High Powered Integrated Light (HPIL)											
Memory Card	Micro SD memory card included											
Communication	Ethernet and RS-232											
Power	24 VDC (±10%)											
Power Consumption	5 W (internal lights), 18 W (internal and external lights)											
Material	Aluminum											
Weight	165 g											
Dimensions	73 mm x 54 mm x 42 mm, 92 mm x 54 mm x 42 mm (with cover and lights)											
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] L Model: 1DMax algorithm with Hotbars II technology for reading the most challenging, high-speed, 1-D barcodes presented in fixed position, either horizontally or vertically.

[2] QL Model: Best-in-class 1-D barcode reading with 1DMax and Hotbars II technology that is optimized for omnidirectional barcode reading.

[3] Q Model: Best-in-class 1-D barcode reading with 1DMax and Hotbars II technology that is optimized for omnidirectional barcode reading. Best-in-class 2-D code reading with 2DMax.

[4] X Model: High-performance code reading for applications that require reading challenging 1-D/2-D codes, including Direct Part Mark (DPM) codes. The X Model also includes patent pending PowerGrid technology to read codes without visible perimeters.