

DataMan 8000 Series Features:

- **Unmatched Code Reading Performance.** Powered by patented Cognex IDMax software technology, the DataMan 8000 Series offers unmatched reading performance.
- **Superior Reading Versatility.** Read codes at variable focal distances with integrated liquid lens technology—a first for industrial handheld readers.
- **Modular Communications.** Quick, easy, interchangeable communication design supports both RS-232/USB and Industrial Ethernet.



Cognex® DataMan® 8000 readers set the new performance standard when it comes to industrial code reading. These newly designed readers build on the capabilities of the existing highly successful DataMan handheld readers, which have been the benchmark for industrial direct part mark (DPM) code reading performance since their release. The DataMan 8000 Series introduces several firsts to industrial handheld reader capabilities, including:

Liquid Lens Technology = Automatic Variable Focus

The DataMan 8000 Series is the first industrial handheld reader to offer integrated liquid lens technology. The adjustable focus of the liquid lens gives the maximum depth of field flexibility for an image-based handheld reader. The liquid lens uses two iso-density liquids—oil is an insulator while water is a conductor. The variation of voltage leads to a change of curvature of the liquid-liquid interface, which in turn results in a change of the focal length of the lens. This proven new technology, already integrated into Cognex fixed-mount readers, enables the 8000 series readers to autofocus at high speed to read DPM marks close up, or long barcodes from a distance. Relative to other autofocus mechanisms, the liquid lens has extremely fast response times and is exceptionally durable with no moving parts.

Superior Code Reading Advancements

The DataMan 8000 Series is powered by Cognex patented IDMax® technology and two powerful algorithms, 1DMax™ and 2DMax™, that provide the most advanced decoding available for reading virtually every type of code, every time, with unsurpassed read rates.

For 1D barcodes, 1DMax is our best-in-class reading tool optimized for omnidirectional barcode reading that can handle extreme variations. And, for 2D codes, 2DMax technology from Cognex set the industry standard for the most challenging Data Matrix DPM applications.

Ethernet

The DataMan 8000 Series readers are the first to offer Ethernet communication capability in a handheld reader. Now, handheld readers can be integrated directly into the factory network for real-time product traceability.

Modular Communications

The DataMan 8000 Series is the first to introduce interchangeable modules for different communication interfaces... both RS-232/USB and Industrial Ethernet communication. This flexibility enables users to modify their initial reader installation to meet future communication requirements. The system's unique field exchangeable modular communication design allows users to easily upgrade from RS-232/USB to Industrial Ethernet by simply exchanging a compact communication unit within the reader.

The DataMan 8000 Series represents a true breakthrough for industrial handheld readers and are available in two models:

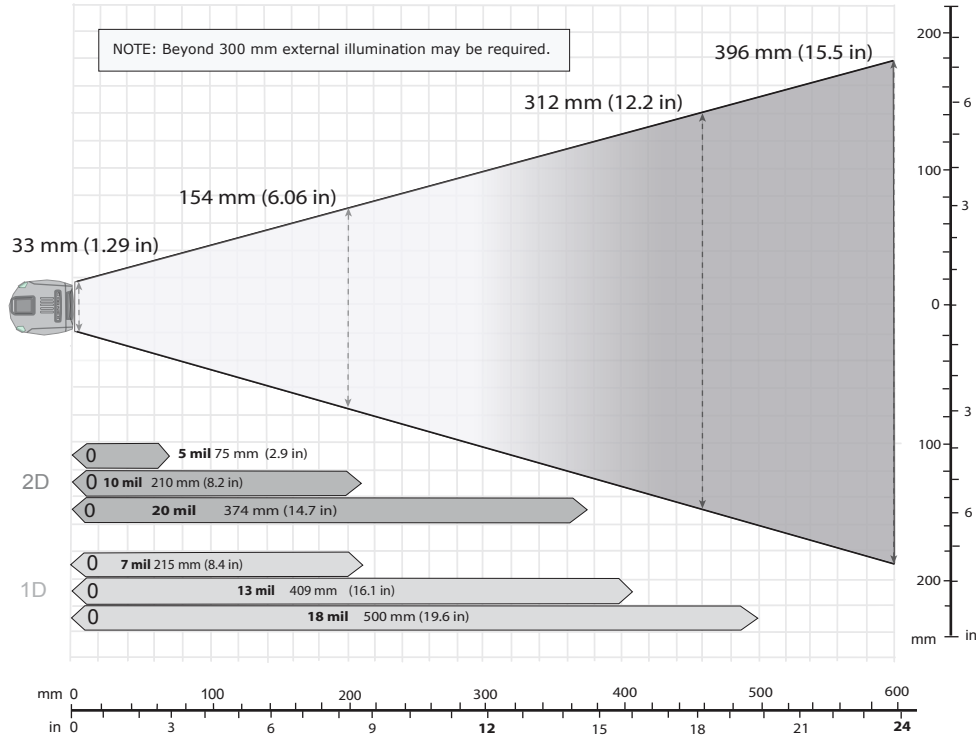
- **DataMan 8500.** The DataMan 8500 readers incorporate patented UltraLight® technology from Cognex for superior image formation on any mark type and surface.
- **DataMan 8100.** Includes all the features of the DataMan 8500 readers, with bright field illumination. The DataMan 8100 readers are ideal for applications that require superior code reading performance without specialty lighting.

DataMan 8000 Series

Specifications

Dimensions	220 mm x 155 mm x 85 mm	Lighting:	
Weight	326 g	DataMan 8500	UltraLight integrated bright field, dark field and diffuse illumination
Operating Temperature	0°C to 40°C (32°F to 104°F)	DataMan 8100	Integrated bright field illumination
Storage Temperature	-40°C to 60°C (-40°F to 140°F)	Optics	Variable focus liquid lens (0 to over 250mm depending on code element size)
Maximum Humidity	95% (non-condensing)	Power Supply Requirements	DataMan 8100 with Serial/USB: +5V - +6V DC, 2.5 W maximum LPS or NEC Class 2 power supply DataMan 8500 with Serial/USB: +5V - +6V DC, 5.0 W maximum LPS or NEC Class 2 power supply DataMan 8100/8500 with Ethernet: PoE Class 2 supply
Material	Polycarbonate housing with overmold	Environmental	Compliant with RoHS directive 2002/98/EEC
Drop Resistance	50 drops from 2 m	Regulatory:	
Imager	1280 x 1024 High Resolution Sensor	Electrical	CE, CSA, UL 60950, EN/IEC 60950-1
Aiming	Laser Aimer, Class 2	EMI/RFI	FCC Part 15, CE, EN55022, EN55024, ICES-003, AS/NZS CISPR 22, Japan VCCI, MIC
Status Outputs	LED, Beeper and Vibration		
Communications	Serial Module: RS-232, USB and PS/2 Ethernet Module: TCP/IP and FTP functionality		
Data Validation	US DoD UID Guidelines, GS-1, ISO15434 and ISO15418		
Symbologies	1D: UPC/EAN/JAN; Codabar, Interleaved 2 of 5, Code 39, Code 128, and Code 93, Pharma, Postal, GS1 Databar, PDF417, Micro PDF417 2D: Data Matrix, QR, MicroQR		
Operating System	Microsoft® Windows® XP and Windows 7		

Field of View and Reading Distances



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