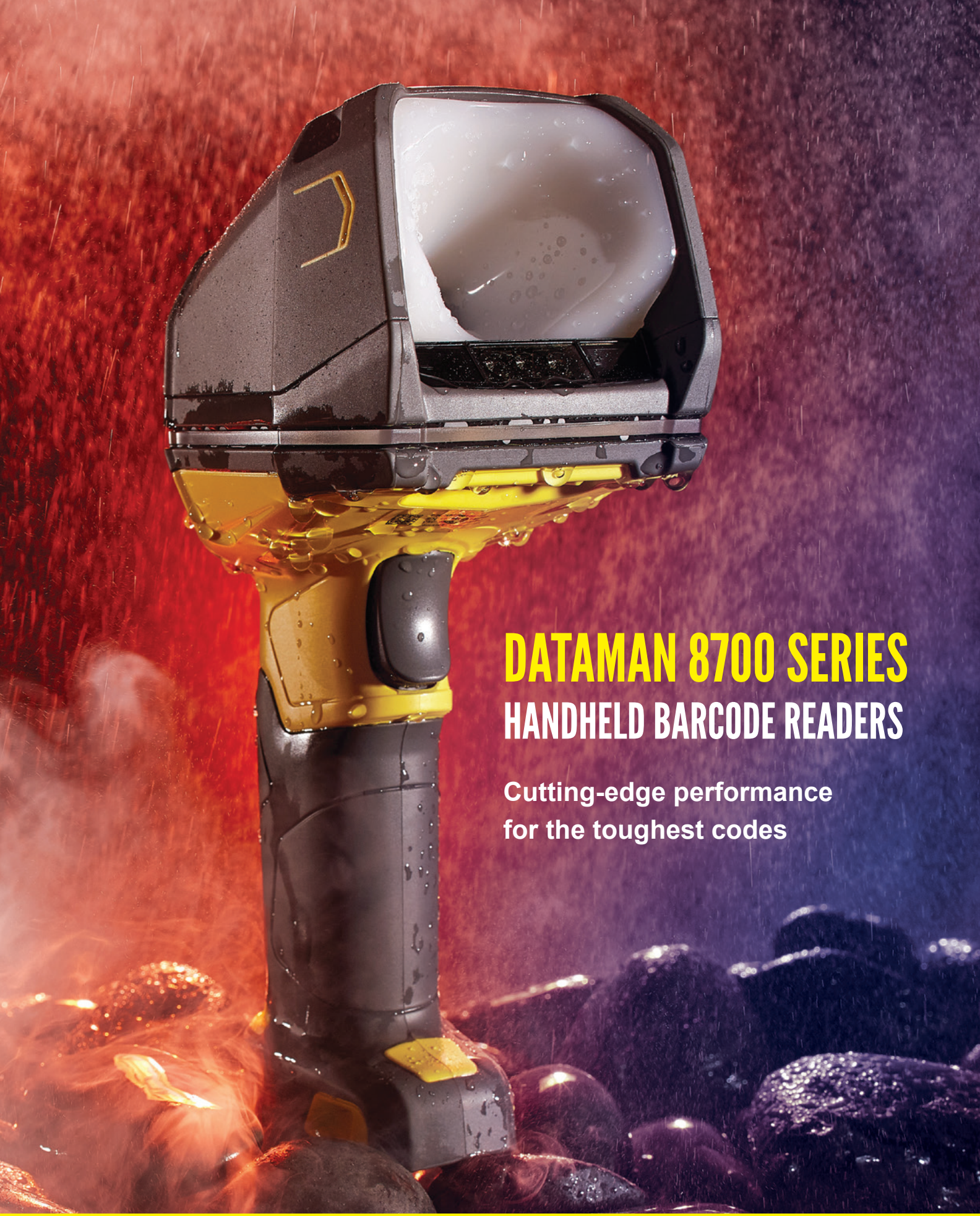

DATAMAN 8700 SERIES

HANDHELD BARCODE READERS

Cutting-edge performance for the toughest codes

COGNEX

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DATAMAN 8700 SERIES HANDHELD BARCODE READERS

Cutting-edge performance for the toughest codes

DataMan 8700DX

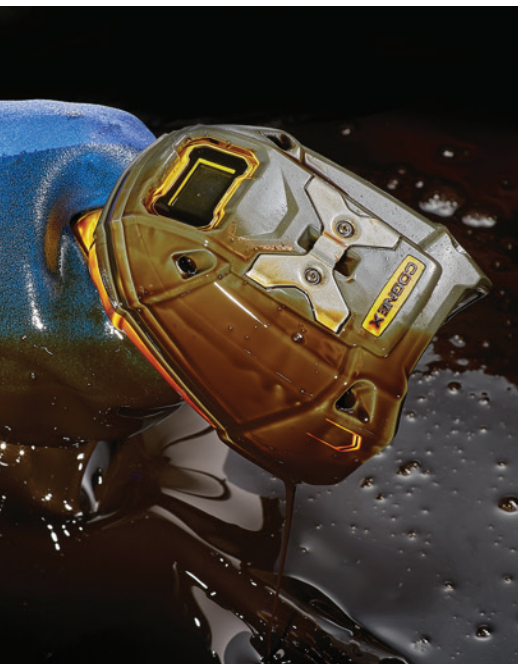
Manufacturing environments in automotive, medical device, electronics, aerospace, and other industries require rugged, high performing, and easy to use barcode reading technology to ensure top component traceability and productivity. The DataMan® 8700 series handheld barcode readers decode the toughest direct part mark (DPM) and label-based codes while withstanding harsh oils, dirt, and water. A built-in display screen enables quick setup and operator feedback, and the readers support a broad range of industrial protocols and communications to connect and operate efficiently in any facility.

- **Oil and water resistant**
- **Advanced integrated lighting**
- **High capacity battery**
- **Fast response times**
- **Patented decoding algorithms**

DataMan 8700DQ

Oil- and water-resistant housing

In the past, oils and fluids surrounding the application site have quickly damaged barcode scanners, but the DataMan 8700 is built to last in the harshest environments. It has IP67-rated housing and meets the ISO 16750-5 oil specification for oil resistance. It is submergible in one meter of water without causing damage and withstands multiple drops from 2.5 meters onto concrete.

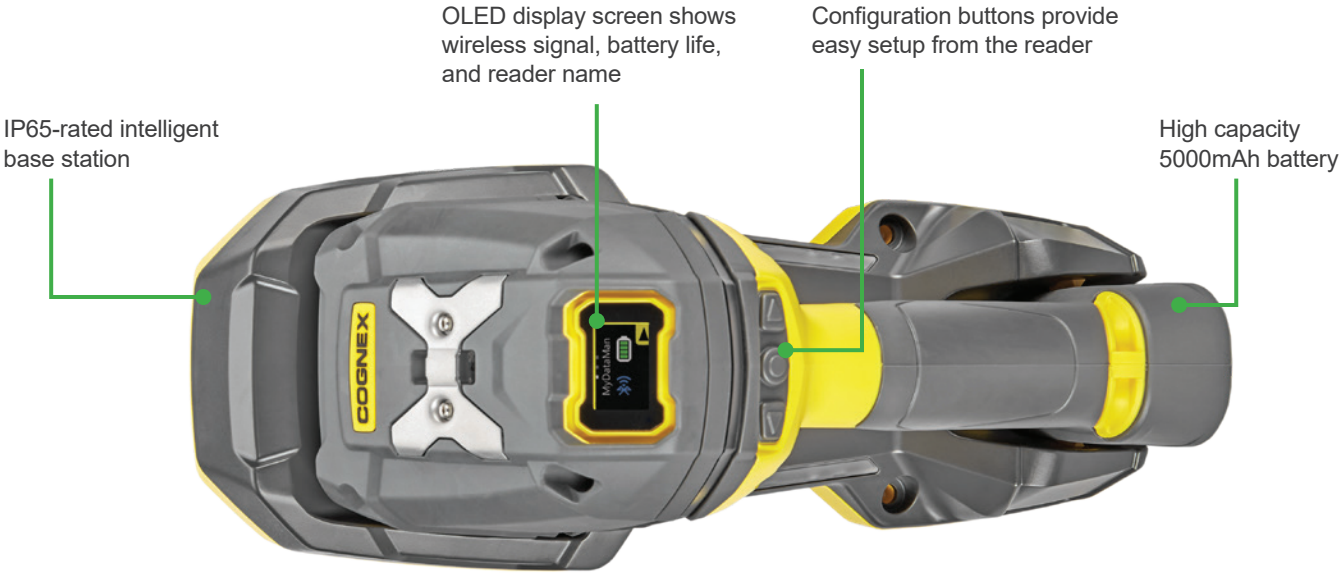


Rugged design with innovative technology

Unique to DX

Platform features

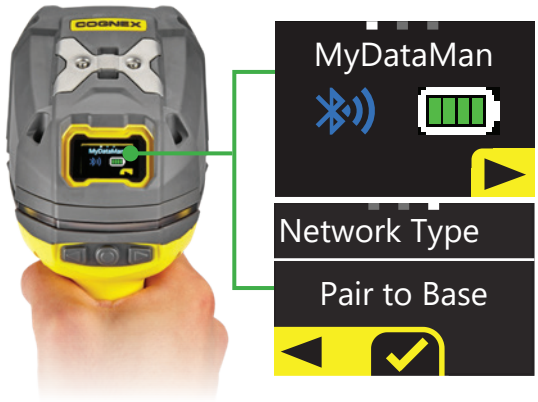
Unique to DQ



Setup without connecting to a PC

First-of-its-kind OLED display screen to make setup easy and to give operators quick and intuitive feedback without connecting to a PC.

- Setup the reader using the configurator buttons below the screen
- Name the reader so it's easy to know which station it belongs to
- View the wireless signal strength to ensure the reader is within range
- Monitor battery life so the reader doesn't power down mid-shift
- Review code data to ensure a successful read



Integrated industrial protocols enable DataMan 8700 to easily connect to PLCs and factory networks. The DataMan 8700 supports more communication options than ever before including Bluetooth 4.2 and a corded option.

Premium read performance in milliseconds

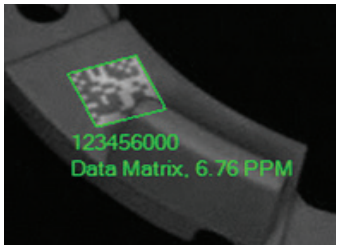
DataMan 8700 series is equipped with the latest patented decoding algorithms and a multi-core processor to read codes in under 150 milliseconds.

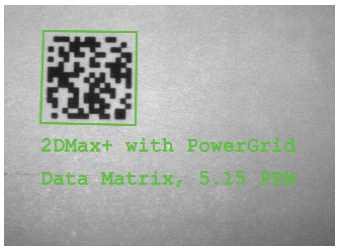
1DMax Hotbars

1DMax® with Hotbars® is an algorithm and technology optimized for omnidirectional 1D barcode reading, decoding up to 10X the speed of a conventional barcode reader.

2DMax PowerGrid

2DMax® with PowerGrid® is a breakthrough algorithm and technology designed to read 2D codes with significant damage to or complete elimination of a code's finder or clocking pattern, or quiet zone.





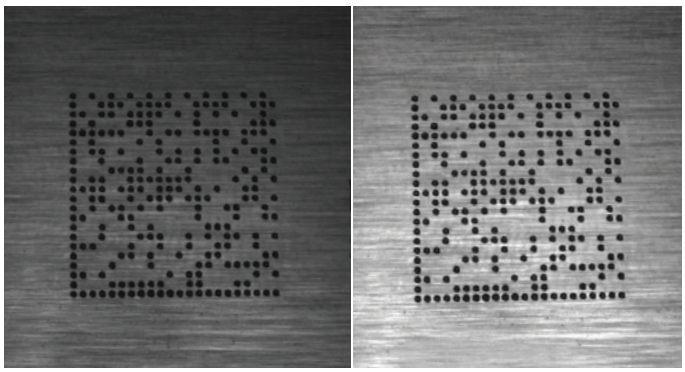
High speed multi-core processor provides ultra-high speed decode response times, enabling operators to scan codes faster.

DX advanced features

The DataMan 8700DX model was designed with advanced features like HDR imaging technology and a high speed liquid lens to reliably scan the toughest codes.

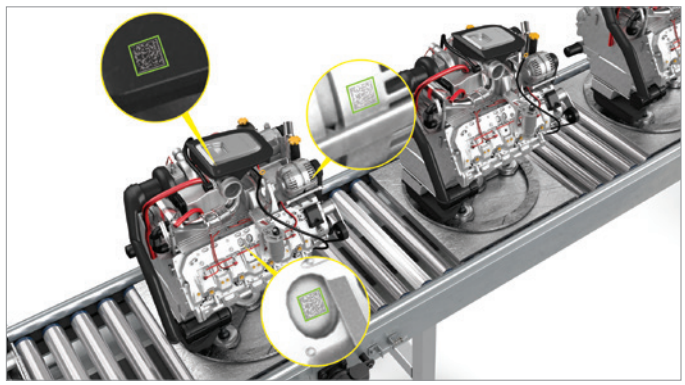
High Dynamic Range (HDR) imaging uses the latest CMOS image sensor technology to acquire single images that are significantly more detailed than conventional sensors. HDR takes advantage of the extra available image data to:

- Enhance image quality and contrast
- Show more detail in the image
- Capture features that were not visible before
- Increase depth of field
- Reduce light intensity

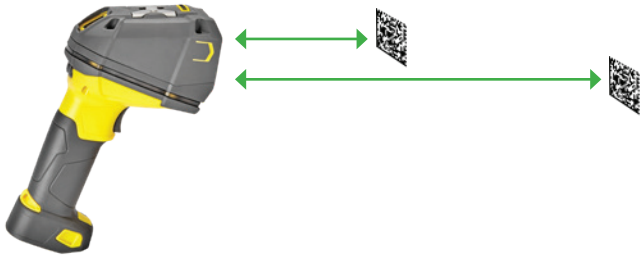


No HDR | With HDR

Integrated **diffuse, polarized, and direct lighting** enables superior image formation to read dot peen, laser-etched, and label-based codes on challenging (shiny, cylindrical, dark) surfaces without any hot spots.



High speed liquid lens (autofocus) technology automatically adapts to changes in working distances without any reconfiguration or wait time to focus. It enables greater depth of field range without compromising optical quality to read codes faster and easier at distances near and far.



DataMan 8700 offers cutting-edge performance, robustness, and ease-of-use to improve part traceability and improve factory efficiency and productivity. To learn more, visit cognex.com/dataman-8700.

SPECIFICATIONS

	DataMan 8700DX	DataMan 8700DQ
Algorithms	1DMax, 2DMax, Hotbars, PowerGrid	
Resolution	1.6MP	
Lens	8 mm lens with liquid lens	6.2 mm fixed lens
Aimer	On-axis green LED aimer	
Status Outputs	OLED display, LED ring light, beeper, vibration	
Communications	Serial: RS-232 and USB Ethernet: TCP/IP, FTP, industrial protocols: EtherNet/IP, PROFINET, MC protocol, Modbus TCP Intelligent base station: RS-232, USB, Ethernet, industrial protocols Bluetooth communicates to intelligent Bluetooth base station	
Lighting	Diffuse, polarized, direct	Diffuse
Symbologies	1D: UPC/EAN/JAN, Codabar, Interleaved 2 of 5, Code 39, Code 128, Code 93, POSTNET, PLANET Code, IMB, Postal 2D: Data Matrix, QR, MicroQR, PDF417, MaxiCode, Aztec	
Dimensions	Wireless: 221 mm (H) x 114.1 mm (L) Corded: 233.2 mm (H) x 114.1 mm (L)	Wireless: 211.4 mm (H) x 113.1 mm (L) Corded: 223.4 mm (H) x 113.1 mm (L)
Weight	Wireless weight: 548 g (battery included) Corded weight: 450 g (+ approx. 130 g for cables)	Wireless weight: 479 g (battery included) Corded weight: 395 g (+ approx. 130 g for cables)
Operating Temperature	0°C–40°C (32°F–104°F)	
Storage Temperature	-40°C–60°C (-40°F–140°F)	
Maximum Humidity	95% (non-condensing)	
Power Supply Requirements	DataMan 8700 with serial/USB: 5.5 V DC, 6.0 W maximum LPS or NEC Class 2 power supply DataMan 8700 with Ethernet: PoE Class 2 power supply DataMan 8700 with Bluetooth: 3.7 V, 5000 mAh Li-ion battery DataMan Intelligent Base Station: 5.5 V DC, 6 W maximum LPS or NEC Class 2 power supply or PoE Class 2 power supply	
Wireless Unit Scans per Full Charge	125,000+	
Protection	Handheld reader: IP67; Base station: IP65	
Drop Test	Multiple drops from 2.5 meters or 50 drops from 2 meters	
Environmental	Compliant with latest EU RoHS and China RoHS	
Regulatory	EU: CE EMC & RED USA/Canada: cTÜVus IEC 61010-1, part 15, ICES 03 Korea: KCC	
Data Validation	US DoD UID guidelines, GS-1, ISO15434 and ISO15418	
Operating System	Windows 7 and Windows 10	

COGNEX

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

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