

DATAMAN 8050 SERIES BARCODE READERS

High speed 1D/2D handheld barcode reader

DataMan® 8050 barcode readers bring Cognex's patented algorithms to a new, lightweight industrial handheld platform. DataMan 8050 reads 1D and 2D barcodes with incredible speed every time even if damaged, smudged, scuffed or poorly marked.

Modular design easily adapts to meet your needs

Field interchangeable communication modules allow one reader to be configured to meet specific communication needs to support RS-232, USB, and Ethernet options.

Rugged industrial design

The DataMan 8050 barcode reader is constructed to handle the harshest environments. Other industrial features include: lanyard hook for easy retractor mounting, bright centralized aimer for clear targeting, loud beeper, and indicator lights.



Proven performance

The DataMan 8050 readers are ideal for applications in any manufacturing environment that require robust barcode technology and reliable reading performance:

- Automotive body and assembly
- Incoming inspection
- Shipping
- Automotive kitting
- Electronics manufacturing
- Aerospace
- Packaging
- Receiving

High speed 1D/2D reading performance

- Cognex's patented algorithms, 1DMax® with Hotbars®, enable the DataMan 8050 barcode reader to decode the most challenging 1D barcodes quickly and easily, at more angles and in any orientation.
- Class-leading 2D algorithms read many 2D symbologies even when damaged, obstructed or with perspective distortion. Supported 2D symbologies include: Data Matrix, QR, PDF417, MaxiCode, and Aztec.
- Best-in-class reading performance means 8050 reads damaged, plastic-wrapped, direct inkjet, low-contrast, poorly printed, scraped, obstructed, uneven, torn, small, and smudged barcodes.



Flexible and easy integration

- Intuitive quick setup allows the user to configure the communication and data formatting settings for many common applications.
- Custom setup sheets can be printed out from within the setup tool.
- DataMan setup tool software enables image viewing, complete suite of tools, Java scripting, PERL scripting and a variety of advanced data formatting options.



ESD-Safe Handheld Barcode Readers

DataMan corded electrostatic discharge (ESD)-safe handheld barcode readers are designed with ESD protective housing to prevent costly damage to electronic parts and devices.



SCAN CHART

Type	Depth of Field
7 mil 2D Code	Up to 40 mm
10 mil 2D Code	Up to 80 mm
Code39 6 mil	Up to 90 mm

DATAMAN 8050 SERIES SPECIFICATIONS

Dimensions	210 mm x 115 mm x 85 mm
Weight	Corded: 0.615 lbs./279 g
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Storage Temperature	-40 °C to 60 °C (-40 °F to 140 °F)
Maximum Humidity	95% (non-condensing)
Material	Polycarbonate housing with overmold
Imager	752 x 480 global shutter sensor
Aiming	Centralized green LED aimer
Status Outputs	LED and beeper
Communications	Serial module: RS-232, USB Ethernet module (DataMan 8050E): TCP/IP, FTP, industrial protocols: Ethernet/IP, PROFINET, MC Protocol, ModBus TCP
Symbologies	1D: UPC/EAN/JAN; Codabar, Interleaved 2 of 5, Code 39, Code 128, Code 93, GS1 Databar, PDF417, Micro PDF417, Postal Code 2D: Data Matrix, QR, MicroQR, Aztec, MaxiCode
Lighting	Integrated LED with near/far optics
Power Supply Requirements	5 V-6 V DC, 2.5 W LPS or NEC Class 2 power supply
Protection	IP-65
Environmental	Compliant with RoHS directive 2002/98/EEC
Regulatory	Electrical: CE, CSA, UL, 60950 EMI/RFI: FCC Part 15, CE (EMC and R&TTE Directives), ICES-003, RSS-210 Issue 8, KCC
ESD Standards Compliance	IEC 61340-5-1:2016 for select models only
Data Validation	US DoD UID guidelines, GS-1, ISO15434 and ISO15418
Operating System	Microsoft® Windows® XP, Windows 7 and Windows 8

COGNEX

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

Corporate Headquarters
One Vision Drive
Natick, MA 01760 USA

Contact us or find your regional sales office:
www.cognex.com/sales

Americas

North America +1 855 426 4639
Brazil +1 855 426 4639
Mexico +52 552 789 5444

Europe

Austria +49 721 958 8052
Belgium (FR) +33 176 549 318
France +33 176 549 318
Germany +49 721 958 8052
Ireland +353 21 601 9005
Italy +39 02 9475 4345
Spain +34 93 220 6237
Switzerland (DE) +49 721 958 8052
Switzerland (FR) +33 176 549 318
United Kingdom +353 21 601 9005
Other Europe +353 21 601 9005

Asia-Pacific

China +86 218 036 5424
India +91 7305 040397
Japan +81 345 790 266
Korea +82 704 784 4038
Singapore +65 3158 2511
Taiwan +886 801 492 017
Other Asia-Pacific +65 3158 2511

© Copyright 2025, Cognex Corporation.
All information in this document is subject to change without notice. All Rights Reserved.
Cognex, Dataman, Hotbars, and 1DMax are registered trademarks of Cognex Corporation.
All other trademarks are the property of their respective owners. Lit. No. DM8050-DS-03-2025

www.cognex.com