| 1  | Getting Started | About DataMan 8050 • DataMan 8050 Accessories • Physical Layout of the Reader and the Base Station | Page 4 |
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About DataMan 8050

The DataMan 8050 readers offer the industry’s most advanced technology for reading 1D and 2D codes regardless of size, quality, printing method or surface, and belong to the only industrial handheld ID reader family that offers Industrial Ethernet communication.

DataMan 8050 is available with patented 1DMax+ with Hotbars, class-leading 2-D algorithms and future-proof modular communication slide-ins.

The DataMan 8050 readers use bright field illumination and and class leading algorithms in two models: 8050 and 8050X. The DataMan 8050 is designed for high-speed reading of challenging label-based barcodes and the 8050X reads more challenging barcodes, including direct part mark barcodes.

An intelligent base station is also provided when the DataMan 8050 reader uses the wireless (Bluetooth or WiFi) communication module. The base station acts as a router between the reader and your computer or network. Infrastructure Mode does not use the base station for communication (see page 30-31).

*NOTE:* Henceforward, the term ‘wireless’ refers in this document to the WiFi or to the Bluetooth communication module of the reader.

The DataMan 8000 series base stations are available with the following communication options:

<table>
<thead>
<tr>
<th>Base Station Communication</th>
<th>Wireless Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet with Industrial Protocols</td>
<td>USB</td>
</tr>
<tr>
<td>DMA-CBASE-01</td>
<td></td>
</tr>
<tr>
<td>DMA-IBASE-BT-01</td>
<td>√</td>
</tr>
<tr>
<td>DMA-IBASE-BT-02</td>
<td>√</td>
</tr>
<tr>
<td>DMA-IBASE-01</td>
<td>√</td>
</tr>
</tbody>
</table>
## DataMan 8050 Accessories

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial/USB slide-in</td>
<td>DMCM-SERIALM-00</td>
</tr>
<tr>
<td>Ethernet slide-in</td>
<td>DMCM-ENETM-00</td>
</tr>
<tr>
<td>Bluetooth slide-in</td>
<td>DMCM-BTM-00</td>
</tr>
<tr>
<td>Wireless slide-in</td>
<td>DMCM-WLESSM-00</td>
</tr>
<tr>
<td>Charging Base Station</td>
<td>DMA-CBASE-01</td>
</tr>
<tr>
<td>Intelligent Bluetooth Base Station</td>
<td>DMA-IBASE-BT-01</td>
</tr>
<tr>
<td>Power Supply for base station</td>
<td>DMA-24VPWR-xx</td>
</tr>
<tr>
<td>Power Supply for reader</td>
<td>DM100-PWR-00</td>
</tr>
<tr>
<td>Battery for the wireless reader</td>
<td>DMA-HHBATTERY-01</td>
</tr>
<tr>
<td>POE Adapter</td>
<td>CPS-24V-POE1</td>
</tr>
<tr>
<td>POE Adapter</td>
<td>CPS-24V-POE4</td>
</tr>
<tr>
<td>Wall Mount</td>
<td>DMA-WALL-8000-00</td>
</tr>
<tr>
<td>Wall Mount for Base Station</td>
<td>DMA-IBASE-WALL-00</td>
</tr>
<tr>
<td>Stand</td>
<td>DM-STAND-00</td>
</tr>
<tr>
<td>POE Adapter</td>
<td>CPS-AC-POE1A-xx</td>
</tr>
<tr>
<td>DataMan 8050 Reader Cables</td>
<td></td>
</tr>
<tr>
<td>RS-232 coiled cable for reader, 2.5 m</td>
<td>DM8000-RS232-02</td>
</tr>
<tr>
<td>RS-232 coiled cable for reader, 5 m</td>
<td>DM8000-RS232-05</td>
</tr>
<tr>
<td>RS-232 industrial cable for reader, 2.5 m</td>
<td>DM8000-RS232IND-02</td>
</tr>
<tr>
<td>USB cable, 2.5 m</td>
<td>DM8500-USB-00</td>
</tr>
<tr>
<td>USB coiled cable, 2.5 m</td>
<td>DM8500-USBC-02</td>
</tr>
</tbody>
</table>
## DataMan 8050 Accessories (Continued)

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet Coiled cable, 5m</td>
<td>DM8000-ECABLEC-05*</td>
</tr>
<tr>
<td>Ethernet cable, 2.5 m</td>
<td>DM8000-ECABLE-02</td>
</tr>
<tr>
<td>Ethernet cable, 5m</td>
<td>DM8000-ECABLE-05</td>
</tr>
<tr>
<td>Ethernet cable, 30 m</td>
<td>DM8000-ECABLE-30</td>
</tr>
<tr>
<td>RJ25 (RJ12) to DSUB9 cable for base station, 5 m</td>
<td>DMA-RS232RJ-05</td>
</tr>
</tbody>
</table>

*Note: Collimated cable length including DM8000-ECABLE-X should not exceed 50 m.

### DataMan Base Station Cables
- USB cable for base station: Use any standard USB-A to USB-B 2.0 cable up to 3 meters
- Ethernet cable for base station: Use any standard CAT5/5e, SF/FTP or S/FTP cable
- DMA-USB-00: Straight 10ft USB cable

### Physical Layout of the Reader
- **LED aimer guide**
- **Trigger** (press and hold to read)
- **Communication module insertion point**

1. Lanyard hook
2. Indicator light
3. Communication module insertion point
Physical Layout of the Base Station

**DMA-IBASE-01**
- Base station status indicators
- Connection point with the reader:
  - Pairing reader and base station
  - Non-wireless communication
  - Charging
- Spare battery charger
- Power plug (24V, max. 13W)
- Ethernet (with optional Class 3 PoE power)

**DMA-IBASE-BT-XX**
- Base station status indicators
- Connection point with the reader:
  - Pairing reader and base station
  - Non-wireless communication
  - Charging
- Power plug (24V, max. 15W)
- Alternative power supply connector (24V, max. 15W, polarity marked on the plastic part near the connector)
- RS-232
- USB
- Ethernet

**NOTE:**
- DMA-IBASE-BT-01 does not support Ethernet
- DMA-IBASE-BT-02 does support Ethernet

Base station status indicators:
- Power: RED = base powered / BLINK = wrong reader in base
- Communication: BLUE = Wireless link / BLINK = Wireless communication
- Cradle connections: GREEN = reader properly inserted / BLINK = cradle USB interface communication
Overview of Setting Up the Reader

To be able to connect to your reader or base station on your computer, you must perform the following steps:

1. Install the Setup Tool on your computer.

2. Select the connection type: Ethernet, Serial, or USB; and connect the appropriate cabling.

3. Power on your device(s).

Install DataMan 8000 Software

1. Check the DataMan Release Notes for a full list of system requirements.


3. Connect the DataMan 8050 to your PC.

4. Launch Setup Tool and click Refresh. The reader or the base station appears under COM ports or Network devices.

5. Select a COM port or a Network device and click Connect.
Connecting a DataMan 8050 Through RS-232

1. Connect the serial slide-in (DMCM-SERIALM-00) to your DataMan 8050.

2. With a 2.5 mm Allen Wrench, tighten the screws so that the slide-in is firmly locked.

3. Insert the plug and slide the cable lock up to the reader and twist the cable lock in place.

Use the DM8000-RS232-02 cable (2.5 meters) or the DM8000-RS232-05 cable (5 meters). For power supply, use the DataMan 8000 Power Supply (DM100-PWR-000).

Observe the following electrical requirements:

**WARNING**

- For proper RS-232 operation, do not apply any voltage to pin 9.

Power on the RS-232 cable can be supplied by either the DC Power Plug or Pin 1 of the D-SUB. **DO NOT** use both in parallel.

1. 6VDC power supply (DM100-PWR-000), a 5.5mm x 2.1mm DC Power Plug

2. VCC = +4.75V up to +6.0V for 2.5 m cable
   
   VCC = +5.5V up to +6.0V for 5.0 m cable
Connecting a DataMan 8050 Through USB

1. Connect the serial slide-in (DMCM-SERIALM-00) to your DataMan 8050.

2. With a 2.5 mm Allen Wrench, tighten the screws so that the slide-in is firmly locked.

3. Insert the plug and slide the cable lock up to the reader and twist the cable lock in place.

Use the DM8500-USB-00 cable (2.5 meters) or the DM8500-USBC-02 cable (2.5 meters).

NOTE: DataMan 8050 does not require an external power supply.

WARNING
Disconnect DataMan from power before inserting/removing communication modules.

Using Your Device Through USB

If you connect your reader with the coiled USB cable, you must use your device in USB 1.1 mode. With a straight USB cable, you can use your device in both modes.

Change the USB Connection in the Serial tab of the Communication Settings pane in Setup Tool, or scan the appropriate code from the DataMan Configuration Codes document.

You can also switch the USB mode (CDC or HID) of both the reader and the base station with a pair of RP codes. Perform the following steps:

1. Disconnect from Setup Tool if you are connected.
2. Scan the “Enable USB Keyboard for the base station” code from the DataMan Configuration Codes document.
3. Start scanning codes with your wireless reader.

Bluetooth
Connecting to a Wireless DataMan 8050 Through a Base Station

1. Connect the wireless slide-in (DMCM-BTM-00) to your DataMan 8050.

2. With a 2.5 mm Allen Wrench, tighten the screws so that the slide-in is firmly locked.

3. Insert the battery.

4. Insert the plug and twist it in place.

5. Power up the DMA-IBASE-BT-XX base station using a 24V power supply (DMA-24VPWR-XX). In the case of a DMA-IBASE-01 base station, use either a 24V power supply, or a Class 3 Power Over Ethernet adapter.

6. Connect your base station to your PC using either serial, USB or Ethernet communication.

**WARNING**
Remove battery from your DataMan before inserting/removing the communication module.
Wireless Connections (Continued)

Observe the following electrical requirements when connecting the base station through RS-232:

![Diagram]

WARNING
For proper RS-232 operation, do not apply any voltage to pin 9.

Power to base station can be supplied by either the DC power plug or by wiring in 24V. **DO NOT** use both in parallel.

The DC power plug is a 24VDC power supply (DMA-24VPWR-xx), 3.5mm x 1.3mm.

**NOTE**: Be careful to use the appropriate connector for RS-232. (See page 19.)

7. When the base station is powered up, scan the Pair scan code and place your reader into the base station. The base station’s status indicator becomes green. When the wireless reader is removed from the base, a wireless connection is established. The status indicator of both the base station and the reader become blue and you can hear a beep. Blue lights indicate that the reader and the base have successfully paired and are communicating.

8. Connect to your base station or to the wireless reader. You have the following connection options:

<table>
<thead>
<tr>
<th>Base Station Connection Type</th>
<th>Connect to Reader in the Setup Tool</th>
<th>Connection Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-232</td>
<td>Wireless reader appears: COM port (Base Station does not appear)</td>
<td>terminal program Setup Tool</td>
</tr>
<tr>
<td>USB</td>
<td>Base Station appears: COM port 1 Wireless reader appears: COM port 2</td>
<td>terminal program Setup Tool</td>
</tr>
<tr>
<td>Ethernet</td>
<td>Base station appears: Network device 1 Wireless reader appears: Network device 2</td>
<td>terminal program Setup Tool</td>
</tr>
</tbody>
</table>
9. Lift your reader up from the base station and start reading codes.

NOTES

• When the reader is on the base station, communication is established by means of cradle contacts. Wireless communication is disabled.
• Configure wireless communication settings by connecting to the base station. In order for the changed settings to be synchronized between the DataMan 8050 wireless reader and the base station, place your reader in the base station after your changes are saved. To assign a static IP address to the base station or the reader when communicating via Ethernet, connect to the base station in Setup Tool. The base station, however, auto-assigns the IP address to the reader when they become paired.
• When you connect with the base station to a terminal program, your wireless reader sends decode results to the terminal, but you cannot send commands to the reader.
• If you want to unpair your reader from the base station, you can either click Unassign in the Bluetooth or Wireless tab of the Communication Settings pane of Setup Tool (when you are connected either with the reader or the base station), or scan the “Unassign Reader” reader configuration code.
• If you place the wrong reader (that is, a reader that is not associated with the base station) into the base station, the base station status indicator flashes red and a series of short beeps can be heard.

Pairing Strategy (DMA-IBASE-BT-XX)

In order to pair the base station and the reader in a single step without considering former pairing states and without using Setup Tool, scan the Pair code from the scan code sticker on the base station.

The reader then blinks green/blue until it gets paired with the base station (or until the end of the 20 second timeout period). When the reader is put on the base station, the base station drops its pairing with its old reader and pairs with the new reader.

IMPORTANT!
Scanning the Pair code puts the base station and the reader put on it into force pairing mode.
This means that the reader and the base it is put on get paired regardless of any assignments they both had previously. This force pairing mode is valid for 20 seconds after reading the Pair code.
Pairing Strategy (Continued)

When the reader is put onto another (unpaired) base station without any previous actions, the base station signals this event with beeping and red flashing of its indicators.

The base station that is paired with a certain reader signals a bad reader alert (beeps and flashing red indicators) also when another, unassigned reader is put into it.

Base Station Routing Capabilities

The base station is visible as connected through either RS-232, USB or Ethernet, but it routes data through the wireless interface to the reader.
Ad-hoc Mode

It is possible to connect to the reader wirelessly with the computer in ad-hoc mode (using a reader-created Wifi connection). Reset the reader to factory defaults (this configures the device to ad-hoc mode), and after the device appears under Wifi connections, connect to it with Setup Tool and then use the Wireless tab under Communication Settings to configure authentication and encryption (which are not configured by default). For more information, see the Communications and Programming Guide.

NOTE:
- The base station is only used for charging the reader in this setup. If an intelligent base station is used, the reader has to be unassigned in Setup Tool (connected to the base station) under Communication Settings > Wireless tab if the reader has already been placed in the base station.
- Also note that placing the reader in the intelligent base station automatically re-assigns it to the base station unless the base station is unplugged from the network first.

Infrastructure Mode

It is possible to connect to the reader in infrastructure mode using Wifi connection. You need to reset the reader to factory defaults, connect to the device in ad-hoc mode, and then use the Wireless tab under Communication Settings to activate and configure infrastructure mode. Infrastructure mode requires a router as an access point. Encryption and authentication are available as seen in the table below. See the Communications and Programming Guide for detailed information.

<table>
<thead>
<tr>
<th>Authentication mode</th>
<th>Encryption</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open System</td>
<td>WEP-40, WEP-104</td>
<td>passphrase</td>
</tr>
<tr>
<td>WPA-PSK, WPA2-PSK</td>
<td>TKIP, AES, TKIP/AES</td>
<td>passphrase</td>
</tr>
</tbody>
</table>
| EAP-TLS             | TKIP, AES, TKIP/AES | • Client's certificate  
|                     |             | • CA's certificate  
|                     |             | • Client's private key  
|                     |             | • Client's username  |
| PEAP-MSCHAPv2       | TKIP, AES, TKIP/AES | • CA's certificate  
|                     |             | • Client's username  
|                     |             | • Client's password  |

NOTE:
- The base station is only used for charging the reader in this setup. If an intelligent base station is used, the reader has to be unassigned in Setup Tool (connected to the base station) under Communication Settings > Wireless tab if the reader has already been placed in the base station.
- Also note that placing the reader in the intelligent base station automatically re-assigns it to the base station unless it is unplugged from the network first.
**Wireless Reader: Buffering Data**

When you are within the wireless range of the base station, your wireless reader sends decoded data to your PC through the base station, just as if you used a tethered reader. You can also see the decoded images in Setup Tool, if it is running and is connected to the reader.

When you leave the wireless range, however, you lose connection to your PC, but you can still keep reading codes. The decoded data is saved in the buffer of the reader.

This buffered data appears on your PC again when you come back within the wireless range, but **ONLY IF** you were connected to a terminal program when you left the wireless range.

Buffered read results on the reader are not displayed in Setup Tool; they are only transmitted over an existing keyboard emulation, RS-232 Serial or TCP/IP Telnet connection. **NOTE** that the images acquired by the reader when it is out of the wireless range are **never** saved, and cannot be retrieved.

Open a connection with the reader in a terminal program so that you gain the buffered data when wireless connection is established again.

See the following table for connection options according to communication type:

<table>
<thead>
<tr>
<th>Base Station Connection Type</th>
<th>How to Connect</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-232</td>
<td>Connect to the COM port of the base station.</td>
</tr>
<tr>
<td>USB</td>
<td>Connect to the COM port of the wireless reader.</td>
</tr>
<tr>
<td>Ethernet</td>
<td>Connect to the terminal program using the IP address of the reader. To find out the IP address, go to the <em>Connect to Reader</em> pane in Setup Tool and hover your mouse over the reader. The IP address appears.</td>
</tr>
<tr>
<td>USB Keyboard</td>
<td>Open the text editor or your program of choice to use keyboard emulation. When you return to the wireless range, keyboard emulation continues, starting with the buffered data.</td>
</tr>
</tbody>
</table>

While you are still within the wireless range, the reader occasionally blinks blue to indicate that the wireless connection is established.

When the reader leaves the wireless range, the base station’s signal becomes red.

Blinking blue status indicator: wireless connection is alive.
Wireless Reader: Buffering Data (Continued)

When you leave the wireless range, you can still keep reading codes. The reader going offline is indicated by a long beep and the status indicator flashes magenta.

status indicator blinks magenta: your reader is offline

When the reader is offline, good reads are indicated with 2 short beeps and the selected good read status indicator color (green by default).

status indicator beeps twice: your reader is offline while decoding symbols

When the buffer is full, no more codes are read. The reader does not discard the oldest read.

when the buffer is full, the reader beeps and the status indicator becomes white

<table>
<thead>
<tr>
<th>Condition</th>
<th>Status Indicator: Reader</th>
<th>Status Indicator: Base Station</th>
<th>Sounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reader in wireless range of base station</td>
<td>When the reader is awake, blinking blue indicates wireless connection with base. When the reader is offline, no indicator. Pull the trigger to wake it up and it will blink blue. Good read: green, single beep (default) No read: red, no beep (default)</td>
<td>Reader out of the base station and reader is awake: steady blue. Reader out of the base station and reader is offline: steady red. Paired reader in the base station: flashing green. Base station is receiving data or images from reader: steady blue.</td>
<td>Good read: 1 beep (default) No read: no beep (default)</td>
</tr>
<tr>
<td>Reader out of wireless range of base station</td>
<td>Offline: When the reader wakes up out of the wireless range, there is no indicator. Good read: green (default) No read: red (default)</td>
<td>Reader offline: steady red.</td>
<td>Long beep when you leave the wireless range. Good read: 2 beeps No read: no beep</td>
</tr>
<tr>
<td>Reader out of wireless range, buffer is full</td>
<td>Good read: green and then white. No read: red (default)</td>
<td>Reader offline: steady red</td>
<td>Good read: long beep No read: no beep</td>
</tr>
</tbody>
</table>

Summary of Wireless Buffering Indicators
Wireless Reader: Charging

When you are reading codes with your wireless reader, blinking red status indicators will indicate a low battery. As the battery discharges, the blink frequency increases.

Blinking red status indicator indicates low battery or thermal shutdown mode.

Place the reader on the base station for charging. Make sure that the pins at the end of the handle make contact with the pins in the base station.

You can also check the status of the battery in Setup Tool.
## Wireless Reader: Charging (Continued)

Refer to the following table for a summary of indicators regarding charging.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Status Indicator: Reader</th>
<th>Status Indicator: Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery low</td>
<td>flashing red indicators</td>
<td>• steady blue, indicating connection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• flashing blue, indicating data transfer</td>
</tr>
<tr>
<td>Reader is charging in the base station</td>
<td>steady red indicators</td>
<td>• steady green, indicating connection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• flashing green, indicating data transfer</td>
</tr>
<tr>
<td>Reader is fully charged in the base station</td>
<td>steady green indicators</td>
<td>• steady green, indicating connection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• flashing green, indicating data transfer</td>
</tr>
</tbody>
</table>

### Wireless Reader: Changing Batteries

To change batteries, perform the following steps:

1. Twist the reader’s end cap, and take it off.

2. Hold the reader in an upright position and the battery will slide out of the handle. NOTE that you may need to shake the reader slightly.

---

**CAUTION**

The battery used in these devices may present a risk of fire or chemical burn if mistreated. Do not disassemble, heat above 60°C (140°F), or incinerate. Replace battery with Cognex DMA-HHBATTERY-01 only. The use of another battery may present a risk of fire or explosion.
Wireless Reader: Changing Batteries (Continued)

3. Put the replacement battery into the slot. The battery has a small triangle on one side. Make sure that you insert the battery in a way that the triangle end goes into the slot first.

4. Put the end cap back on and twist it.

5. If using DMA-CBASE-01, place the battery in the spare battery charger in the direction of the small triangle of the battery.

When you are charging the auxiliary battery, the base station’s spare battery status indicator displays either charging in progress (red) or fully charged (green).

6. Dispose of used battery promptly. Keep it away from children. Do not disassemble and do not burn it. Use the appropriate separate take-back systems for battery disposal.
**Trigger Types**

The DataMan 8050 trigger mode determines when the reader attempts to read a code. Use Setup Tool or the appropriate reader configuration codes to change trigger types.

The following trigger types are supported:

- **Presentation**: The LED aimer is always on.
- **Manual (default)**: Begins acquiring images when you press the trigger button on the reader, and continues acquiring images until a symbol is found and decoded or you release the button.

**DataMan 8050 Imager Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>DataMan 8050 Imager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Sensor</td>
<td>1/3 inch CMOS</td>
</tr>
<tr>
<td>Image Sensor</td>
<td>6.0 µm square pixels</td>
</tr>
<tr>
<td>Image Resolution</td>
<td>752 x 480</td>
</tr>
</tbody>
</table>

**Map of Field of View and Reading Distances**

**NOTE**: that due to tolerances, ranges can vary by +/- 5 mm for small codes to +/- a couple of centimeters for large codes.
Industrial Protocols

The DataMan 8050 readers support the following industrial protocols:

- EtherNet/IP™
- PROFINET
- MC Protocol
- Modbus TCP

Select the industrial protocol tools and sample programs when installing the Setup Tool.

There are three ways to enable or disable Industrial Protocols. Using either method, a reboot is required for the changes to come into effect.

- Enable the protocols using the Industrial Protocols pane of the Setup Tool (under Communication Settings).
- Scan the appropriate Reader Configuration codes (see Reader Configuration Codes available through the Windows Start menu or the Setup Tool Help menu).
- Send the appropriate DMCC (see Command Reference available through the Windows Start menu or the Setup Tool Help menu).

For more information on using the industrial protocols, read the DataMan Communications and Programming Guide available through the Windows Start menu or the Setup Tool Help menu.

DataMan 8050 Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>400 g (with battery)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0°C — 45°C (32°F — 113°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-10°C — 60°C (14°F — 140°F)</td>
</tr>
<tr>
<td>Maximum Humidity</td>
<td>95% (non-condensing)</td>
</tr>
<tr>
<td>Codes</td>
<td>Data Matrix™; QR Code and microQR Code; UPC/EAN/JAN; Codabar, Interleaved 2 of 5, Code 39, Code 128, and Code 93, Pharma, Postal, RSS/CS, PDF 417, MicroPDF 417</td>
</tr>
<tr>
<td>Power Supply Requirements</td>
<td>- USB: bus powered (optionally: external 2.5Wmax LPS or NEC class 2 power supply +5V - +6V DC)</td>
</tr>
<tr>
<td></td>
<td>- RS232 external 2.5Wmax LPS or NEC class 2 power supply +5V - +6V DC</td>
</tr>
<tr>
<td></td>
<td>- ETH: Class 2 PoE supply IEEE 802.3af (connect only to PoE networks without routing to the outside plant)</td>
</tr>
<tr>
<td>Inrush current peak</td>
<td>5A maximum Duration: approx. 30µs Electrical charge: 60µAs at 6V</td>
</tr>
<tr>
<td>Battery life for wireless reader (typical use case)</td>
<td>ca. 3200 triggers can be operated within a 10 hour working shift</td>
</tr>
<tr>
<td>Ethernet</td>
<td>10/100 Base-T FULL/HALF DUPLEX, IEEE 802.3</td>
</tr>
<tr>
<td>Bluetooth</td>
<td>Bluetooth™ 2.1, 2.4 GHz</td>
</tr>
<tr>
<td>WiFi</td>
<td>802.11 b/g, 2.4 GHz, User Selectable channels 1-11</td>
</tr>
</tbody>
</table>
The DataMan 8050 series device meets or exceeds the requirements of all applicable standards organizations for safe operation. However, as with any electrical equipment, the best way to ensure safe operation is to operate them according to the agency guidelines that follow. Please read these guidelines carefully before using your device.

The following specifications apply to the DataMan 8050 corded readers:

### Agency Compliance Statements

**FCC Class A Compliance Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

**Canadian Compliance**

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
European Compliance

This equipment complies with the essential requirements of EU Directives 1999/5/EC, 2004/108/EC and 2006/95/EC, as applicable. Declarations are available from your local representative.


Agency Compliance Statements (Continued)
The crossed out wheeled bin symbol informs you that the product should not be disposed of along with municipal waste and invites you to use the appropriate separate take-back systems for product disposal.

If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration. You may also contact your supplier for more information on the environmental performance of this product.

For European Union Users
Cognex complies with Directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on waste electrical and electronic equipment (WEEE). This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.
Agency Compliance Statements: DataMan Base Station

The DataMan Base Station meets or exceeds the requirements of all applicable standards organizations for safe operation. However, as with any electrical equipment, the best way to ensure safe operation is to operate them according to the agency guidelines that follow. Please read these guidelines carefully before using your device.

FCC Class A Compliance Statement for the DataMan Base Station

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

<table>
<thead>
<tr>
<th>Regulator</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>FCC Part 15B, Class A</td>
</tr>
<tr>
<td></td>
<td>FCC Part 15.247</td>
</tr>
<tr>
<td>Canada</td>
<td>ICES-003</td>
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<tr>
<td></td>
<td>RSS 210</td>
</tr>
<tr>
<td>European Community</td>
<td>EN301 489-1 / -17</td>
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<tr>
<td></td>
<td>EN300 328-2</td>
</tr>
<tr>
<td></td>
<td>EN60950</td>
</tr>
</tbody>
</table>

FCC Class A Compliance Statement for the DataMan Base Station

Changes or modifications made to this equipment not expressly approved by Cognex may void the FCC authorization to operate this equipment.

Canadian Compliance

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

UL and cUL Statement

UL and cUL listed: UL60950-1 2nd ed. and CSA C22.2 No.60950-1 2nd ed.

European Compliance

This equipment complies with the essential requirements of EU Directives 1999/5/EC, 2004/108/EC and 2006/95/EC, as applicable. Declarations are available from your local representative.

Changes or modifications made to this equipment not expressly approved by Cognex may void the FCC authorization to operate this equipment.

Canadian Compliance

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

UL and cUL Statement

UL and cUL listed: UL60950-1 2nd ed. and CSA C22.2 No.60950-1 2nd ed.

European Compliance

This equipment complies with the essential requirements of EU Directives 1999/5/EC, 2004/108/EC and 2006/95/EC, as applicable. Declarations are available from your local representative.


Agency Compliance Statements: DataMan Base Station (Continued)

For European Union Users

This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.

The crossed out wheeled bin symbol informs you that the product should not be disposed of along with municipal waste and invites you to use the appropriate separate take-back systems for product disposal.

If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration. You may also contact your supplier for more information on the environmental performance of this product.
Reader Control Codes

- Reset Scanner to Factory Defaults
- Reboot Scanner
- USB Serial
- USB Keyboard
- Enable DHCP
- USB Keyboard for Base Station
- Pair

Keyboard Language (Corded Readers Only)

- US English
- German
- French
- Spanish
- Japanese

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