

## **IQecg®, IQholter®, Midmark® Digital Spirometer, IQvitals® Zone™ and Midmark® Digital Vital Signs Device**

Software versions:

- IQecg v10.2.1 or later
- IQholter/EX/EP v10.0.10 or later
- Midmark Digital Spirometer v11.0.7 or later
- IQvitals v11.0.15 or later (*Digital Vital Signs Device and IQvitals Zone*)

<p><b>*Operating Systems</b></p>	<p>Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit)</p> <p>Windows® 11 Professional, Enterprise</p> <p>Windows® Server 2022, 2025</p> <p>*The following are not supported on Windows 11 and/or Server 2022/2025:</p> <ul style="list-style-type: none"> <li>• No versions of IQholter are supported on Windows 11 or Server 2022</li> <li>• IQecg v10.0.8 and below</li> <li>• IQvitals v11.0.10 and below</li> <li>• Midmark Digital Spirometer v11.0.3 and below</li> </ul>
<p><b>Hardware Requirements</b></p>	<p>Windows compatible personal computer.</p>
<p><b>CPU</b></p>	<p>Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00 GHz, 800 MHz FSB) (x86) or 64-bit (x64) processor or faster.</p>
<p><b>Disk</b></p>	<p>2 GB of free disk space or greater.</p>
<p><b>Memory</b></p>	<p>Minimum 4 GB of system memory.</p>
<p><b>Input/Output Ports Per Device</b></p>	<p>One (1) USB port*:</p> <p>The above computer port is required for new ECG and spirometry test acquisitions. It is not required to review and/or edit test data.</p> <p>*For IQholter - a flash card reader is required for new test downloads only. It is not required to review and/or edit test data.</p> <p>Additional USB ports as needed for keyboard, mouse, printer, flash card reader, etc.</p>
<p><b>Pointing Device</b></p>	<p>Windows compatible mouse.</p>
<p><b>Keyboard</b></p>	<p>Windows compatible keyboard.</p>
<p><b>Display</b></p>	<p>1024x768 or higher resolutions for the real-time acquisition screen. 16-bit color. Wide-screen (1680x1050) is highly recommended.</p>

<b>Printer</b>	Microsoft® Windows compatible inkjet or laser printer.
<b>Surge Protector</b>	One (1) hospital-grade power surge protector for the computer system.
<b>Additional Requirements</b>	Please note, only IQvitals Zone firmware v0.14.4 is compatible with IQvitals plugin v11.0.13 and higher.

**Note:**

The above are the minimum computer/system requirements for operating the Midmark products stated. A faster CPU, additional hardware and/or more memory may be needed, depending on the IT environment.

\*The Operating System is a hard requirement. Installing or operating the above Midmark software product(s) on Windows operating systems other than those listed is not recommended or supported.

## Midmark® Digital ECG

Software versions:

- IQecg® 10.0.10 or later (Midmark Digital ECG supports the 60601-2-25 Standard in v10.0.10 later)

<b>*Operating Systems</b>	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® 11 Professional, Enterprise Windows® Server 2022, 2025
<b>Hardware Requirements</b>	Windows compatible personal computer.
<b>CPU</b>	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00 GHz, 800 MHz FSB) (x86) or 64-bit (x64) processor or faster.
<b>Disk</b>	2 GB of free disk space or greater.
<b>Memory</b>	Minimum 4 GB of system memory.
<b>Input/Output Ports Per Device</b>	One (1) USB port*:  The above computer port is required for new ECG and spirometry test acquisitions. It is not required to review and/or edit test data.  Additional USB ports as needed for keyboard, mouse, printer, flash card reader, etc.
<b>Pointing Device</b>	Windows compatible mouse.
<b>Keyboard</b>	Windows compatible keyboard.
<b>Display</b>	1024x768 or higher resolutions for the real-time acquisition screen. 16-bit color. Wide-screen (1680x1050) is highly recommended.
<b>Printer</b>	Microsoft® Windows compatible inkjet or laser printer.
<b>Surge Protector</b>	One (1) hospital-grade power surge protector for the computer system.

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## IQmanager®

Software versions:

- Midmark IQmanager v10.1.6

<b>*Operating Systems</b>	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® 11 Professional, Enterprise
<b>Software Requirements</b>	Microsoft .NET Framework 4.6.2 (included with installer) C++ Redistributable 2019 (included with installer)
<b>Database</b>	Microsoft SQL Server 2022 (SQL Server 2022 Express is included with installer) 4 GB or greater
<b>Hardware Requirements</b>	Windows compatible personal computer.
<b>CPU</b>	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00 GHz, 800 MHz FSB) (x86) or 64-bit (x64) processor or faster.
<b>Disk</b>	2 GB of free disk space or greater.
<b>Memory</b>	Minimum 4 GB of system memory.
<b>Input/Output Ports Per Device</b>	One (1) USB port*:  The above computer port is required for new ECG and spirometry test acquisitions. It is not required to review and/or edit test data.  *For IQholter - a flash card reader is required for new test downloads only. It is not required to review and/or edit test data.  Additional USB ports as needed for keyboard, mouse, printer, flash card reader, etc.
<b>Pointing Device</b>	Windows compatible mouse.
<b>Keyboard</b>	Windows compatible keyboard.
<b>Display</b>	1024x768 or higher resolutions for the real-time acquisition screen. 16-bit color. Wide-screen (1680x1050) is highly recommended.
<b>Printer</b>	Microsoft Windows compatible inkjet or laser printer.

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Midmark diagnostic devices may have additional computer hardware requirements. Please refer to the operation manual or other sections of this document for the specific Midmark device.

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## Midmark Connect for Cerner

Software versions:

- Midmark Connect for Cerner v10.2.3

<b>Server Requirements</b>	
<b>Hardware Requirements</b>	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00 GHz, 800 MHz FSB) (x86) or 64-bit (x64) processor or faster. Minimum 8 GB of system memory.
<b>*Operating Systems</b>	Windows® Server 2012, 2012 R2, 2016, 2019, 2022
<b>Software Requirements</b>	IIS 7.5 or higher, .NET Core 2.1.16.
<b>Database</b>	Microsoft SQL Server 2012, 2014 or 2016 Standard Edition 10 GB database or greater
<b>Client Requirements</b>	
<b>*Operating Systems</b>	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit)  Windows® Server 2012, 2012 R2, 2016, 2019, 2022
<b>Software Requirements</b>	Microsoft .NET Framework 4.6.2
<b>HL7 Interface Engine Requirement</b>	
<b>Mirth</b>	Mirth Connect v3.8.1 or higher
<b>Qvera</b>	QIE Standard v4.0.47 or higher

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Midmark diagnostic devices may have additional computer hardware requirements. Please refer to the operation manual or other sections of this document for the specific Midmark device.

\*The Operating System is a hard requirement. Installing or operating the above Midmark software product(s) on Windows operating systems other than those listed is not recommended or supported.

## Midmark Connect for Altera

Software versions:

- Midmark Connect for Altera v10.1.0

<b>Server Requirements</b>	
<b>Hardware Requirements</b>	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00 GHz, 800 MHz FSB) (x86) or 64-bit (x64) processor or faster. Minimum 8 GB of system memory.
<b>*Operating Systems</b>	Windows® Server 2019, 2022
<b>Software Requirement</b>	IIS 7.0 or higher, .NET Framework 4.6.2.
<b>Database</b>	SQL Server 2016, SQL Server 2019 10 GB database or greater.
<b>Client Requirements</b>	
<b>*Operating Systems</b>	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit)  Windows® Server 2016, 2019, 2022.
<b>Software Requirements</b>	Microsoft Edge® 106 or later or Google Chrome™ 106 or later, .NET Framework 4.6.2, Altera™ TouchWorks® EHR Client software.

**Note:**

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## IQiC

Software versions:

- IQiC v10.0.3

<b>*Operating Systems</b>	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® 11 Professional and Enterprise Windows® Server 2012, 2012 R2, 2016, 2019 or 2022.
<b>Hardware Requirements</b>	Windows compatible personal computer.
<b>CPU</b>	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00 GHz, 800 MHz FSB) (x86) or 64-bit (x64) processor or faster.
<b>Disk</b>	2 GB of free disk space or greater.
<b>Memory</b>	Minimum 4 GB of system memory.
<b>Pointing Device</b>	Windows compatible mouse.
<b>Keyboard</b>	Windows compatible keyboard.
<b>Display</b>	1024x768 or higher resolutions for the real-time acquisition screen. 16-bit color. Wide-screen (1680x1050) is highly recommended.
<b>Optical Drive</b>	N/A

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## Midmark Connect for Epic®

Software versions:

- Midmark Connect for Epic v12.2.0 or later
- IQiE v10.0.7 or later

<b>Server Requirements</b>	
<b>Hardware Requirements</b>	Intel® Xeon® Processor E5-2673 v4 (2.30 GHz) or faster Minimum 8 GB of system memory.
<b>*Operating Systems</b>	Windows® Server 2022, 2025
<b>Software Requirements</b>	IIS 7.5 or higher, .NET 8, .NET Framework 4.6.2 HTTPS (Signed SSL Certificate)
<b>Client Requirements</b>	
<b>*Operating Systems</b>	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® 11 Professional, Enterprise Windows® Server 2022, 2025
<b>Software Requirements</b>	Microsoft .NET Framework 4.6.2 Microsoft Edge® 93 or later Google Chrome™ browser 93 or later Epic® Hyperdrive® EHR and select Epic® Hyperspace® Client software February 2022 or later, contact Epic® for more details.  Please note: Microsoft Remote Terminal Services (RDP/RDS) are not supported at this time.
<b>PDF Generation Requirement</b>	
<b>Hardware Requirements</b>	Intel Xeon Processor E5-2673 v4 (2.30 GHz) or faster Minimum 4 GB of system memory
<b>*Operating Systems</b>	Windows® Server 2022, 2025
<b>Software Requirements</b>	IIS 7.5 or higher, .NET 8, .NET Framework 4.6.2

<b>Performance Expectations</b>	Midmark Connect for Epic supports the use of multiple PDF Generation Servers. Enabling more PDF Servers will increase the performance of the system.		
	The table below is based on performance testing using a computer that meets the above-mentioned system requirements and utilizing a 30-second PDF return cutoff.		
	# of PDF Servers	Max Simultaneous Requests	Max Asynchronous Requests per min
	1	10	45

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## IQpath®

Software versions:

- IQpath RDP v3.0.7
- IQpath Citrix v3.0.7
- IQpath VMware v3.0.10

<b>Server Requirements</b>	
<b>*Operating Systems</b>	Windows® Server 2012, 2012 R2, 2016, 2019, 2022, 2025 <i>Service Packs or hotfixes may be needed.</i>
<b>Software Requirements</b>	Windows Terminal Services  Citrix XenApp and XenDesktop v7.6  VMware Horizon® 8 Connection Server v8.8.0.
<b>Client Requirements</b>	
<b>*Operating Systems</b>	Windows 11, Professional and Enterprise  Windows 10, Professional and Enterprise, 32-bit and 64-bit
<b>Software Requirements</b>	Microsoft Remote Desktop Connection  VMware Horizon Client v8.8.0  Citrix Receiver Version v14.1  <i>*Please note: Spiro does not support VMware 8.8.0; it supports up to VMware v8.5.0.</i>
<b>Hardware Requirements</b>	Desktop PCs (full client), laptops, notebook, tablet computers, or thin client terminals (for IQpath® the computer needs enough free space to install the required software).

<p><b>Input/Output Ports Per Device</b></p>	<p>One Universal Serial Bus (USB) port, or One Communications (COM) port</p> <p>The above computer port is required for new ECG and spirometry test acquisitions. It is not required to review and/or edit test data.</p> <p>IQecg v10.0.0 no longer supports serial devices (COM ports). Additional USB ports as needed for keyboard, mouse, printer, flash card reader, etc.</p>
<p><b>Network Bandwidth</b></p>	<p>See 61-78-0001 Thin Client Manual IQpath Section II-A and II-C for more details.</p>
<p><b>Midmark Device Hardware</b></p>	<p>See 61-78-0001 Thin Client Manual IQpath Section II-A for more details.</p> <p>IQecg v10.0.0 no longer supports serial devices (COM ports).</p> <p>Digital Spirometer v11.0 no longer supports serial devices (COM ports).</p>

**Note:**

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Since network structures, topologies, and platforms differ between thin client deployments, the following requirements may vary slightly. Midmark strongly recommends setting up a validated pilot project in a lab environment before deploying in a production setting.

\*The Operating System is a hard requirement. Installing or operating the above Midmark software product(s) on Windows operating systems other than those listed is not recommended or supported.

\*For server environments with multiple users/sessions, please ensure that an adequate amount of memory is allocated per user to prevent potential performance issues.

## Minimum Computer/System Requirements



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