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

Software versions:

- IQecg v10.0.6 - 10.1.0
- IQholter/EX/EP v10.0.6 - 10.0.9
- Midmark Digital Spirometer v11.0.1 - 11.0.4
- IQvitals v11.0.9 - 11.0.15 *(Digital Vital Signs Device and IQvitals Zone)*

***Operating Systems**	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® 11 Professional, Enterprise Windows® Server 2022, 2025 *The following are not supported on Windows 11 and/or Server 2022/2025: • No versions of IQholter are supported on Windows 11 or Server 2022 • IQecg v10.0.8 and below • IQvitals v11.0.10 and below • Midmark Digital Spirometer v11.0.3 and below
Hardware Requirements	Windows compatible personal computer.
CPU	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00GHz, 800MHz FSB) (x86) or 64-bit (x64) processor or faster.
Disk	2GB of free disk space or greater.
Memory	Minimum 4 GB of system memory.
Input/Output Ports Per Device	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.
Pointing Device	Windows compatible mouse.
Keyboard	Windows compatible keyboard.

Display	1024x768 or higher resolutions for the real time acquisition screen. 16-bit color. Wide-screen (1680x1050) is highly recommended.
Printer	Microsoft® Windows compatible inkjet or laser printer.
Surge Protector	One (1) hospital grade power surge protector for the computer system.
Additional Requirements	Please note, only IQvitals Zone firmware version 0.14.4 is compatible with IQvitals plugin 11.0.13 and higher.

Note:

The above is the minimum computer requirement specification 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 above Midmark Software Product in Windows Operating Systems other than those listed are not recommended or supported.

Midmark® Digital ECG

Software versions:

- IQecg® 10.0.10 – IQecg 10.0.11
  (Midmark Digital ECG supports the 60601-2-25 Standard in V10.0.10 and above)

***Operating Systems**	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® 11 Professional, Enterprise Windows® Server 2022, 2025
Hardware Requirements	Windows-compatible personal computer.
CPU	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00GHz, 800MHz FSB) (x86) or 64-bit (x64) processor or faster.
Disk	2GB of free disk space or greater.
Memory	Minimum 4 GB of system memory.
Input/Output Ports Per Device	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.
Pointing Device	Windows-compatible mouse.
Keyboard	Windows-compatible keyboard.
Display	1024x768 or higher resolutions for the real time acquisition screen. 16-bit color. Wide-screen (1680x1050) is highly recommended.
Printer	Microsoft® Windows compatible inkjet or laser printer.
Surge Protector	One (1) hospital-grade power surge protector for the computer system.

Note:

The above is the minimum computer requirement specification 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 above Midmark Software Product in Windows Operating Systems other than those listed are not recommended or supported.

IQmanager®

Software versions:

- Midmark IQmanager v10.1.6

***Operating Systems**	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® 11 Professional, Enterprise
Software Requirements	Microsoft .NET Framework 4.6.2 (included with installer) C++ Redistributable 2019 (included with installer)
Database	Microsoft SQL Server 2022 (SQL Server 2022 Express is included with installer) 4GB or Greater
Hardware Requirements	Windows compatible personal computer.
CPU	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00GHz, 800MHz FSB) (x86) or 64-bit (x64) processor or faster.
Disk	2GB of free disk space or greater.
Memory	Minimum 4 GB of system memory.
Input/Output Ports Per Device	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.
Pointing Device	Windows compatible mouse.
Keyboard	Windows compatible keyboard.
Display	1024x768 or higher resolutions for the real time acquisition screen. 16-bit color. Wide-screen (1680x1050) is highly recommended.
Printer	Microsoft Windows compatible inkjet or laser printer.

Note:

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

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 above Midmark Software Product in Windows Operating Systems other than those listed are not recommended or supported.

Midmark Connect for Cerner

Software versions:

- Midmark Connect for Cerner v10.2.3

Server Requirements	
Hardware Requirements	Intel® Core™ 2 Duo Processor E8400 (2M Cache, 3.00GHz, 800MHz FSB) (x86) or 64-bit (x64) processor or faster. Minimum 8 GB of system memory.
***Operating Systems**	Windows® Server 2012, 2012 R2, 2016, 2019, 2022
Software Requirements	IIS 7.5 or higher, .NET Core 2.1.16.
Database	Microsoft SQL Server 2012, 2014 or 2016 Standard Edition 10 GB Database or greater
Client Requirements	
***Operating Systems**	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® Server 2012, 2012 R2, 2016, 2019, 2022
Software Requirements	Microsoft .NET Framework 4.6.2
HL7 Interface Engine Requirement	
Mirth	Mirth Connect V3.8.1 or higher
Qvera	QIE Standard V4.0.47 or higher

Note:

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

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 above Midmark Software Product in Windows Operating Systems other than those listed are not recommended or supported.

Midmark Connect for Altera

Software versions:

- Midmark Connect for Altera v 10.1.0

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

Note:

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

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 above Midmark Software Product in Windows Operating Systems other than those listed are not recommended or supported.

IQiC

Software versions:

- IQiC v10.0.3

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

Note:

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

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 above Midmark Software Product in Windows Operating Systems other than those listed are not recommended or supported.

Midmark Connect for Epic®

Software versions:

- Midmark Connect for Epic v 12.1
- IQiE v 10.0.6

Server Requirements	
Hardware Requirements	Intel® Xeon® Processor ES-2673 v4 (2.30GHz) or faster Minimum 8 GB of system memory.
***Operating Systems**	Windows® Server 2022, 2025
Software Requirements	IIS 7.5 or higher, .NET 8, .NET Framework 4.6.2 HTTPS (Signed SSL Certificate)
Client Requirements	
***Operating Systems**	Windows® 10 Professional (32-bit or 64-bit), Enterprise (32-bit or 64-bit) Windows® 11 Professional, Enterprise Windows® Server 2022, 2025
Software Requirements	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 Feb '22 or later, contact Epic® for more details. Please Note: Microsoft Remote Terminal Services (RDP/RDS) are not supported at this time.
PDF Generation Requirement	
Hardware Requirements	Intel Xeon Processor ES-2673 v4 (2.30GHz) or faster Minimum 4 GB of system memory
***Operating Systems**	Windows® Server 2022, 2025
Software Requirements	IIS 7.5 or higher, .NET 8, .NET Framework 4.6.2

<table>
<tr><td>Performance Expectations</td><td>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.
<table>
<tr><td># of PDF Servers</td><td>Max Simultaneous Requests</td><td>Max Asynchronous Request per min</td></tr>
<tr><td>1</td><td>10</td><td>45</td></tr>
</table></td></tr>
</table>

Note:

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

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 above Midmark Software Product in Windows Operating Systems other than those listed are not recommended or supported.

IQpath®

Software versions:

- IQpath RDP v 3.0.7
- IQpath Citrix v 3.0.7
- IQpath VMware v 3.0.10

Server Requirements	
***Operating Systems**	Windows® Server 2012, 2012 R2 ,2016, 2019, 2022, 2025 *Service Packs or hot-fixes may be needed.*
Software Requirements	Windows Terminal Services Citrix XenApp and XenDesktop v 7.6 *VMware Horizon® 8 Connection Server v 8.8.0.*
Client Requirement	
***Operating Systems**	Windows 11, Professional and Enterprise Windows 10, Professional and Enterprise, 32-bit and 64-bit
Software Requirements	Microsoft Remote Desktop Connection VMware Horizon Client v. 8.8.0 Citrix Receiver Version v. 14.1 *Please note: Spiro does not support VMware 8.8.0. Supports up
Hardware Requirements	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).
Input/Output Ports Per Device	One Universal Serial Bus (USB) port, or One Communications (COM) 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. IQecg v. 10.0.0 no longer supports Serial devices (COM ports). Additional USB ports as needed for keyboard, mouse, printer, flash card reader, etc.

Network Bandwidth	See 61-78-0001 Thin Client Manual IQpath Section II-A and II-C for more details.
Midmark Device Hardware	See 61-78-0001 Thin Client Manual IQpath Section II-A for more details. IQecg v. 10.0.0 no longer supports Serial devices (COM ports). Digital Spirometer v. 11.0 no longer support Serial devices (COM ports).

Note:

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

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.

Since network structure, topology 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 above Midmark Software Product in Windows Operating Systems other than those listed are not recommended or supported.

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

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