

Carestream Dental strongly adheres to compliance with Microsoft Windows operating systems and hardware compatibility found at <a href="http://www.microsoft.com/whdc/hcl/default.mspx">http://www.microsoft.com/whdc/hcl/default.mspx</a> Only non-emulated Windows operating systems and hardware listed in this document have been fully tested and certified with Carestream Dental Imaging Software. Virtual machines or emulated operating systems are not supported.

Product	Hardware	Supported Operating Systems
Dedicated Image Server (no Imaging software, no driver can be installed on the serve, this is for storage purposes only)	<ul> <li>Pentium 4, 3.2 GHz, 2 GB system RAM</li> <li>1 TB available disk space (RAID setup recommended)</li> <li>DVD drive</li> <li>Ethernet 100/1000 NIC</li> <li>1024 x 768 32-bit video card and supporting monitor</li> <li>Gigabit Ethernet switched network recommended</li> </ul>	32 or 64-bit Windows 2012 Server, Windows 2008, Windows 2008 Server R2
RVG 5x00/6x00 Sensor or 1500/CS1600/CS1200 Intraoral Cameras	<ul> <li>Intel Duo Core 2 GHz, 2 GB system RAM</li> <li>80 GB free disk space</li> <li>DVD drive</li> <li>Ethernet 100/1000 NIC</li> <li>Available high-speed USB 2.0 port</li> <li>256 MB video card Supporting DirectX 9.0c</li> <li>-For RVG 6500 see Install Guide (SM728)</li> </ul>	32 or 64-bit Windows Vista: Business, Ultimate, Enterprise Windows 7: Professional, Ultimate, Enterprise 64-bit only Windows 8 and 8.1: Professional, Enterprise
CS 9000 Panoramic/Cephalometric Acquisition PC	<ul> <li>Intel Core2 Duo 2 GHz, 2 GB system RAM</li> <li>40 GB free disk space (80 GB recommended)</li> <li>DVD drive</li> <li>Two Ethernet 100/1000 NIC's</li> <li>1024 x 768 32-bit 128 MB video card (256 MB recommended) and supporting monitor</li> </ul>	32 or 64-bit Windows Vista: Business, Ultimate, Enterprise Windows 7: Professional, Ultimate, Enterprise 64-bit only Windows 8 and 8.1: Professional, Enterprise
8000 Panoramic/Cephalometric Acquisition PC, Ethernet or PCI	Pentium 4, 3.2 GHz, 1 GB system RAM  40 GB free disk space (80 GB recommended)  DVD drive  1024 x 768 32-bit 128 MB video card (256 MB recommended) and supporting monitor  Ethernet version additional requirements  Two Ethernet 100/1000 NIC's  PCI version additional requirements  One 100/1000 Ethernet NIC  Available full height PCI slot and RS232 serial port  Windows 32-bit OS	8000 Ethernet version: 32 or 64-bit Windows Vista: Business, Ultimate, Enterprise Windows 7: Professional, Ultimate, Enterprise 64-bit only Windows 8 and 8.1: Professional, Enterprise 8000 PCI version limited to 32-bit OS: Windows Vista: Professional, Enterprise Windows 7: Professional, Ultimate, Enterprise
CS 8100 / CS 8100SC / CS 8100SC Access Panoramic / Ceph Acquisition PC	2GHz Intel Duo core, 4 GB system RAM (8 GB if CS 8100 SC / CS 8100SC Access)     250 GB Hard drive with 4 GB for software installation     Graphics-based board on PCI Express video bus with minimum of 512 MB of video RAM     DVD Drive     One Ethernet 100/1000 NIC for connecting to network     One Gigabit Ethernet for connection for the CS 8100	64-bit only Windows 7: Professional, Ultimate, Enterprise Windows 8 and 8.1: Professional, Enterprise Windows 10: Professional, Enterprise
2D Software Viewing Workstation	Intel Core2 Duo 2.4 GHz, 2 GB system RAM (4 GB recommended) 80 GB free disk space (250 GB recommended) DVD RW drive Ethernet 100/1000 NIC Graphic-based board supporting Open GL 1.2 with 512 MB of video RAM on AGP x8 video bus 17" Monitor supporting 1280 x 1024, 32-bit color	32 or 64-bit Windows Vista: Business, Ultimate, Enterprise Windows 7: Professional, Ultimate, Enterprise 64-bit only Windows 8 and 8.1: Professional, Enterprise (no touch screen desktop) Windows 10: Professional, Enterprise



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3D Software Viewing Workstation	<ul> <li>Intel Core2 Duo 2 GHz, 2 GB system RAM (4 GB recommended)</li> <li>80 GB free disk space (250 GB recommended)</li> <li>DVD RW drive</li> <li>Ethernet 100/1000 NIC</li> <li>nVidia GTS 450</li> <li>17" Monitor supporting 1280 x 1024, 32-bit color</li> </ul>	32 or 64-bit Windows Vista: Business, Ultimate, Enterprise Windows 7: Professional, Ultimate, Enterprise 64-bit only Windows 8 and 8.1: Professional, Enterprise
CR 7400 System or 1000 Intraoral Camera	<ul> <li>Pentium 4, 3.2 GHz,1 GB system RAM</li> <li>40 GB free disk space (80 GB recommended)</li> <li>DVD drive</li> <li>Ethernet 100/1000 network card</li> <li>Video card 64 MB (128-256 MB recommended)</li> <li>Available USB 2.0 port</li> <li>Windows 32-bit OS</li> </ul>	32-bit only Windows Vista: Business SP2 Windows 7: Professional, Ultimate, Enterprise
CS 7600 System Acquisition Workstations	2 GHz Intel Dual Core,1 GB system RAM (2 GB recommended) 40 GB free disk space (80 GB recommended) DVD drive Ethernet 100/1000 network card Available USB 2.0 port 256MB nVidia or ATI video card supporting Glide 1.2	64-bit only Windows 8 and 8.1: Professional, Enterprise 32 or 64-bit Windows Vista: Business, Ultimate, Enterprise Windows 7: Professional, Ultimate, Enterprise
CS 9000 3D, 9500, 9300 Select, 9300, or 8100 3D Acquisition PC	3D Acquisition PC is supplied by Carestream Dental in certain markets. Please check with your sales representative or dealer to verify if it is available in your region	*See Item 8 under <b>Notes and functional requirements</b> for more information on 3D acquisition PC
CS 3500 Acquisition Workstation	For Laptop o Intel Core i7 2670QM 2.2Ghz processor (reommcended 2.4 GHz) o Video card nVidia GeForce GTX 660M or better For Desktop o Intel Quad CPU 3.1Ghz processor (recommended Intel Core i7 3770QM 3.4Ghz) o Video card ATI HD 7850 or nVidia GeForce GTX 560Ti or better  Video card driver must support DirectX 11, OpenGL 1.4, and OpenCL 1.1 (recommended OpenGL 4.3) 4 GB or higher RAM (recommended 8 GB) 880GB of free disk space DVD drive Standard CRT/LCD monitor supporting 1440x900 or higher resolution Available USB 2.0 port	32 or 64-bit Windows 7: Professional, Ultimate, Enterprise (64 bit only if orthodontic and implant acquisition) 64-bit only Windows 8 and 8.1: Professional, Enterprise
CS 3600 Acquisition Station	For Laptop Intel Core i7 6820HQ 2.7GHz processor Video card nVidia GeForce GTX 970M or nVidia Quadro M3000M or better For Desktop Intel Core i7 3770 Quad 3.4Ghz processor Video card nVidia GeForce GTX 760 or better  Video card driver must support OpenGL 4.3, and OpenCL 1.1 GB or higher RAM S0GB of free disk space DVD drive Standard CRT/LCD monitor supporting 1440x900 or higher resolution Available USB 2.0 high speed port	64-bit only Windows 7: Professional, Ultimate, Enterprise Windows 8 and 8.1: Professional, Enterprise Windows 10: Professional, Enterprise
CS Restore Design Workstation	Intel Core 2 Duo 2.4Ghz or better  4GB or higher RAM  30MB of free space for installation  There must be free space available for data storage  Nvidia or ATI based video card supporting Glide 1.2 with 512MB of dedicated video RAM  DVD drive (DVD writing capability required for exporting to optical media)  An Ethernet connection must be present for 3D models to be retrieived and sent to the milling device	64-bit only Windows 7: Professional, Ultimate, Enterprise Windows 8 and 8.1: Professional, Enterprise Windows 10: Professional, Enterprise



## **CS 3000 Milling Workstation**

- Intel Core 2 Duo 2Ghz or better
- 2GB or higher RAM
- 2GB of free disk space for installation, 50GB or more free for data storage
- 1280x1024 minimum screen resolution
- DVD drive
- 1 Ethernet adapter if the CS 3000 is connected to the LAN,a DHCP server must be present on the LAN for proper functionality
- If the CS 3000 is connected directly to the PC, it will need 2 Ethernet adapters and a crossover cable to connect to the CS 3000

64-bit only
Windows 7: Professional, Ultimate, Enterprise
Windows 8 and 8.1: Professional, Enterprise

## Carestream Dental Imaging software is tested for backward compatibility with the following hardware:

Intraoral Sensors Trophy RVG UI USB RVG 5x00/6x00

Intraoral Cameras K1000, CS 1200, CS1500, CS1600

## **EPROM versions required (Minimum)**

CS 8000: 3.05 CS 9000: 2.97/1.95 CS 9500: 2.00

- \* A note about minimum system requirements: this document lists the lowest functional specifications for our hardware and software. To assure optimal performance and future upgrade capability more system RAM, higher end graphics cards, and faster CPU's are suggested.
  - 1. Microsoft Word 2000- 2007, Outlook or Outlook Express installed and configured (AOL Communicator not recommended)
  - 2. Installed and up to date Antivirus (some configuration may be needed for optimal performance: Heuristic and real time or office hours scanning disabled)
  - 3. High speed Internet connection for remote support
  - 4. Photo quality printer and or flat bed scanner with transparency adapter recommended
  - Backups and restore system in place: We suggest that you perform a nightly backup on removable media and keep that media in a fireproof safe off-site.
  - A Uninterruptable Power Supply with shutdown software installed at the server machine is recommended.
  - 7. Consult a qualified IT professional about a RAID system installation for your image server
  - 8. Acquisition PCs for large pan/ceph and 3D CBCT units are built for these units and should not have any additional peripherals installed or attached to them. Items include scanners, printers, RVG sensors and intra oral cameras.
  - 9. For optimal performance with the 3D Viewer application, the minimum recommended video card is the nVidia GeForce 450GTS or higher. If this or any other higher quality video board is unable to be used it may be substituted with a 512MB Glide 1.2 compatible video card with reduced performance.
  - 10. One needs to have full administrator rights to install CareStream Software, and be able to provide **administrator credentials**/privileges during interactions with CareStream Support. **Support will NOT** maintain any Administrator Information.

## Windows XP, Vista, Windows 7, Windows 8 compatibility notes:

- Microsoft Windows XP is no longer supported following the support interruption decided by Microsoft.
- Vista, Windows 7, and Windows 8 are not server-class operating systems and must not be used as data servers.
- Dedicated data Servers must not be used as working stations and must not host imaging applications or imaging hardware drivers
- We do not support touch screen desktop from Windows 8
- When comparing minimum system requirements between Carestream hardware, Carestream software or Windows, use the superior hardware specification.
- RVG Synchro Link only works with RVG UI-USB drivers using DIS 6.12.15 and cannot be installed or used in conjunction with any other RVG sensor.
- No Home versions of Microsoft Windows are tested or supported
- Microsoft Small Business Server is not a supported operating system.
- Server and workstations should be kept current with all Windows service packs and critical updates
- Windows XP 64-bit is not supported for any Carestream hardware or software.
- The following products are known not to be compatible with Microsoft Windows 7:
  - Hauppauge model 401 and Impact VCB Video Capture Cards
- The following products are known not to be compatible with Microsoft Windows Vista:
  - Trophy ISA cards that control sensors, cameras, or Digipan cassettes.
  - Hauppauge model 401 and Impact VCB Video Capture Cards
- Microsoft Windows 10 is not currently supported on acquisition computers for Carestream 9300 series, 8000 Ethernet, 5100, 6100, 5200, 6200, 3500, 1200, 1500, 1600, 7200 and 7400 systems.
- Note that 9500, 8000 PCI, RVG UI, 5000, 6000, STV/1000 acquisition stations WILL NOT have Windows 10 compatibility.

