

## About This Document

This document provides a description of the primary specifications and configuration of the server hardware, additional software and environment requirements, and prerequisites for connected third-party systems to be able to successfully run **only** the Sun Nuclear Corporation SunCHECK™ system Machine QA modules (SNC Routine™ and SNC Machine™).

To determine the configuration required to run the entire SunCHECK platform including the Patient modules (DoseCHECK™ and PerFRACTION™), refer to the *SunCHECK Platform Server Specifications* document (Part Number 1299016).

Recommendations made here are in adherence with SunCHECK Instructions for Use.

## SunCHECK Server/Computer Specifications for SunCHECK Machine QA Applications

# of LINACs	CPU Cores	Memory	Storage	Operating System*	MS SQL Server
1-2	4	16	1TB	Microsoft Windows 10 Pro	MS SQL Server Express 2014 or greater
3-4	4	32	1TB	Microsoft Windows Server 2012 R2 Standard Microsoft Windows Server 2016	MS SQL Server Express 2014 or greater
5-12	8	64	1TB	Microsoft Windows Server 2012 R2 Standard Microsoft Windows Server 2016	MS SQL Server Express 2014 or greater
13+	12	96	1TB	Microsoft Windows Server 2012 R2 Standard Microsoft Windows Server 2016	MS SQL Server 2014 or greater Optional MS SQL Server Standard 2014 or 16

**\* Important Note:** An English Language version of Windows Operating System must be installed for correct SunCHECK operation. User interface localization in a different language may then be selected if required.

**Note:** All specifications provided are minimum requirements; higher specifications and newer models of hardware may also be successfully used for SunCHECK configuration

## Other Software Environment Requirements for SunCHECK

Please note that it is the customer's responsibility to procure the necessary software elements and appropriate licenses, and install/implement the software environment described below unless stated otherwise.

Specification	Requirements/Options
MongoDB Software	MongoDB 3.2 Note: Mongo DB is included with the SunCHECK Software Installation Tools. This software element will be installed as part of the SunCHECK Software Installation process.
Network Environment	1 GB/sec Ethernet environment required Note: The SunCHECK server should be available via the network to required treatment machines (linacs), Record & Verify/OIS, and Treatment Planning Systems
Network Backup Considerations	Backup and other non-SunCHECK client-related activity should not use the same communications routes as SunCHECK application communications

## SunCHECK Client Computer System Requirements

Please refer to the table below for requirements for the client computers from which the SunCHECK applications will be accessed. Because the client machines are not processing data, the requirements are relatively basic:

Specification	Requirements/Options
Operating System	Windows 7 or later (32 or 64 bit)
Regional Settings	U.S. or International
Computer	Minimum Requirements: - Pentium 4 (Dual Core) - CPU Speed: 1.6 GHz - Total RAM: 2 GB - Display resolution: 1280 x 1024 - Color depth: 32-bit
Browser	Google Chrome browser (recommended) or Internet Explorer 11.0

# SunCHECK™ Machine QA (continued)

## Third-Party System Prerequisites

The following table provides information on prerequisites for third-party systems for correct operation of the SunCHECK software, and specific functionality as indicated.

The SNC Machine software module is available with two methods of implementing automation, as follows:

- Simplified Automation: The user pushes data to a network folder which SNC Machine software monitors, pulling in and processing the new data automatically.
- Full Automation: With this automation option, SNC Machine communicates with the Record and Verify/Oncology Information System, pulling in new data and processing automatically; delivering the QA treatment on the linac is all that is needed.

OEM System/Sub-System	Revision Required	Notes/Comments
<b>Varian</b>		
ARIA Oncology Information System/ Record & Verify System	≥ V11.0	Earlier revisions of ARIA do not include the DICOM Query/Retrieve functionality required for SunCHECK operation. <b>Note:</b> Only required if using SNC Machine “Full Automation.”
C-Series and Trilogy 4D Treatment Console	≥ V7.4	Prior versions of the 4D Treatment Console do not record the MU information in the DynaLog files (required for SNC Machine operation).
C-Series and Trilogy – PeerSync	N/A	PeerSync is required to be added for C-Series and Trilogy systems, for transfer of DynaLog files to SunCHECK. <b>Note:</b> TrueBeam systems are provided with PeerSync as standard.
<b>Elekta</b>		
MOSAIQ Oncology Information System/ Record & Verify System	No minimum version	For SNC Machine “Full Automation”, CBCT data must be stored in the MOSAIQ BDS folder.
XVI X-Ray Volume Imaging System	No minimum version	kV and CBCT images generated by XVI must be stored by MOSAIQ.
iViewGT™ Electronic Portal Imaging Device and supporting database	≥ V3.4	Required to provide access to EPID data used in SunCHECK.
iCom Messaging Interface	N/A	An iCom connection is required for correct PerFRACTION and SNC Machine operation in SunCHECK.