

AP Suite Data Analysis Computer Requirements

Description

This document describes the minimum computer configuration required to run AP Suite Data Analysis software on a data analysis workstation PC. CAMECA atom probe systems (LEAP® platform systems and EIKOS™ platform systems) are capable of data collection rates of greater than one million ions per minute. The large data sets obtained contain a wealth of information but also increase the computational requirements for the hardware platform used. The recommended configuration presented below is based on currently shipping computer systems and was arrived at by balancing cost, performance, quality of design and warranty/technical support. Contact CAMECA for the latest recommended configuration.

Desktop Workstation Minimum Requirements

- Windows 10®/Windows 11® Professional x64 English
- US region settings
- Dual Xeon CPUs at 2.2 GHz or higher
- 32 GB of RAM
- nVidia Quadro ‘4000’ or newer video card
- 500GB hard drive, SATA 3 Gb/s, 7200 RPM (1TB or more recommended for local data storage)
- A suitable PDF reader for viewing the AP Suite Software User Guide

Laptop Workstation Minimum Requirements

- Windows 10®/Windows 11® Professional x64 English
- US region settings
- Core i7-QM quad core processor
- 16 GB of RAM
- nVidia Quadro 1000M or newer class
- 250GB hard drive, SATA 3Gb/s, 7200 RPM (500GB or more recommended for local data storage)
- A suitable PDF reader for viewing the AP Suite Software User Guide

Video Card Requirements

AP Suite will only run with full functionality when a computer has a separate video card (i.e. not ‘integrated video’). nVidia cards are the only validated video cards. Video cards must use validated drivers to work; other drivers may cause unexpected results. Please contact CAMECA service if you have questions about other video drivers.

Operating System Requirements

AP Suite will only run with full functionality on a 64-bit OS. Windows 10 and Windows 11 are the supported OSes.

AP Suite Data Analysis Computer Requirements

Upgrades

More RAM will improve speed and reliability of AP Suite Software when working with large data sets, and increasing RAM is the most important computer upgrade for AP Suite performance. Faster- and more CPUs may also improve performance. Fast hard drives and/or network connections are also recommended. Using AP Suite Software over a VPN connection is not recommended.

Computers Running Under Minimum Requirements

Although it is not recommended, AP Suite can be run with systems that do not meet the minimum requirements, but significant problems can occur:

- Analysis limited to smaller datasets (e.g. less than 10M ions)
- Analysis proceeds much more slowly
- Analysis can exceed physical memory or speed requirements which may result in program or operating systems failures
- Failures and error messages cannot be repeated with a CAMECA system and cannot be diagnosed

CAMECA supplies preconfigured and tested desktop and laptop AP Suite workstations as well as data storage solutions. Contact CAMECA Sales for more information or to obtain a quotation. Additional information can also be found at www.atomprobe.com.