

Introduction

Integrated Visualization and Analysis Software (IVAS) is a powerful software suite that allows data reconstruction from the LEAP[®] systems and data analysis using a variety of tools developed with input from atom probe experts from around the world.

In recent years, atom probe dataset sizes have grown from hundreds of thousands of ions to hundreds of millions of ions and at times the growth in analysis capabilities and data size has surpassed growth in computing power of normal desktop PCs. IVAS has been developed with optimized code to allow excellent performance on both desktop and laptop systems.

Preconfigured, tested, and validated systems are available directly from CAMECA that are guaranteed to provide stable and efficient analysis. Working on non CAMECA supplied computer systems is not recommended as we may be unable to provide diagnostic support in the event of an error message.

IVAS 3.6.x Desktop Workstation Minimum Requirements

- Windows 7[®] Professional x64 English
- US region settings
- Dual Xeon Six Core CPUs at 2.2 GHz or higher
- 32 GB of RAM (16 GB or more recommended)
- nVidia Quadro 4000 or newer video card
- 500GB hard drive, SATA 3 Gbps, 7200 RPM (1TB or more recommended for local data storage)
- DVD-ROM
- A suitable PDF reader (user manual)

IVAS Laptop Workstation Minimum Requirements

- Windows 7[®] 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 3Gbps, 7200 RPM (500GB or more recommended for local data storage)
- DVD-ROM
- A suitable PDF reader (user manual)

Video Cards: IVAS 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 the CAMECA atom probe technology center if you have questions about other video drivers.

Operating Systems: IVAS will only run with full functionality on a 64bit OS. At this time, Windows 7 is the supported OS. CAMECA supplied workstations that were pre-loaded with Windows Vista x64 will also be fully supported. IVAS must be installed by an administrator account and UAC [control panel/user accounts/UAC] may need to be disabled for full functionality.

Upgrades: More RAM will improve speed and reliability on large data sets and is the most important upgrade. Faster and more CPUs will also improve performance. Fast hard drives and/or network connections are also recommended.

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

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

CAMECA supplies preconfigured and tested desktop and laptop IVAS workstations. Contact us if you are interested in more details or a quotation.
www.atomprobe.com