PC Requirements and Configuration

Aerotech supplies free support for A3200 installation if you purchase an Aerotech industrial PC (Automation Motion Server products) or an approved PC from the supplier list that follows.

PCs Approved for A3200 Installation

Description	Supplier/Part Number
Control Cabinet PCs	Advantech (www.advantech.com) Arrow P/N: C-ARR05-ARK6610-02 (See A3200-iPC, -CC02 Hardware option) Arrow P/N: C-ARR05-ARK6610-01 (See A3200-iPC, -CC03 Hardware option)
4U Rack Mount PCs	 Advantech (www.advantech.com) Arrow P/N: C-ARR05-ACP4020-01 (See A3200-iPC, -R402 Hardware option) BSI (www.bsicomputer.com) BSI P/N: RMS575-AERO-1064B (Intel i5-4590S, 8 GB RAM, 500 GB HDD, Intel HD4000/5000 Graphics, Windows 10 64-bit) BSI P/N: RMS575-AERO-64BIT (Intel i5-4590S, 8 GB RAM, 500 GB HDD, Intel HD4000/5000 Graphics, Windows 7 Pro 64-bit) BSI P/N: RMS575-AERO-32BIT (Intel i5-4590S, 8 GB RAM, 500 GB HDD, Intel HD4000/5000 Graphics, Windows 7 Pro 32-bit)
1U Rack Mount PCs	Advantech (www.advantech.com) Arrow P/N: C-ARR05-ACP1010-01 (See A3200-iPC, -R103 Hardware option) Polywell (www.polywell.com) Polywell P/N: Aero2030 (Intel i5-4590S, 8 GB RAM, 500 GB HDD, Intel HD5000 Graphics, Windows 10 64-bit) Polywell P/N: Aero1763 (Intel i5-4590S, 8 GB RAM, 500 GB HDD, Intel HD5000 Graphics, Windows 7 64-bit) Polywell P/N: Aero1650 (Intel i5-4590S, 8 GB RAM, 500 GB HDD, Intel HD5000 Graphics, Windows 7 32-bit) Polywell P/N: Aero1960 (Intel i5-4590S, 8 GB RAM, 120 GB SSD, Intel HD5000 Graphics, Windows 7 64-bit)
Desktop PCs	Advantech (www.advantech.com) • Arrow P/N: C-ARR05-IPC7120-01 (See A3200-iPC, -DT01 Hardware option)

- 1. Advantech PCs are also orderable through Arrow (www.arrow.com) by using the Advantech part number. Please contact: Kelly O'Rourke (Cell: 412.780.5808, Email: kelly.orourke@arrow.com)
- 2. Advantech PCs are recommended for all A3200 6.03 and newer systems.
- 3. When using the A3200 FireWire network, use a FireWire PCI card (Siig P/N: NN-400012-S8, Aerotech P/N: NFIRE-PCI). The card is not included with the PC.
- When using the A3200 HyperWire fiber optic network, a HyperWire PCIe card must be purchased from Aerotech. This
 card is not included with the PC.
- 5. To correctly configure the PC, Refer to Optimizing PC Performance.

Support Costs for Other PCs

• Before you install the A3200, Aerotech can evaluate your PC for compatibility for a fixed fee (paid in advance of receipt of PC). However, we can not guarantee the compatibility of the evaluated PC due to a wide variety of hardware and software configurations that are out of our direct control.

• After you install the A3200 on a PC that is not approved, Aerotech can help to resolve problems with the PC configuration. Phone/email support for PC's not sent to Aerotech is billed at an hourly rate (1 hour minimum). We will attempt to resolve any configuration issues, but can not guarantee that we will resolve the problem.

Recommended PC Specifications

Aerotech cannot guarantee the real-time capabilities of a PC that is not approved for A3200 installation because BIOS settings and chip sets are different for each motherboard manufacturer.

PC Specifications for A3200 Installation		
Processor	Recommended: • Intel Core 2 Quad, Intel Core i5/i7, or Xeon processor with four or more cores (1.2.3) Not Supported: • AMD, Intel Celeron, Intel Pentium 4, Intel Pentium D, Itanium, or notebook/laptop/mobile processors (4)	
RAM	Recommended: • 4 GB for 32-bit Operating System • 8 GB for 64-bit Operating System	
Operating System ⁽⁵⁾	 32-bit or 64-bit version of the following: Microsoft Windows 10 Microsoft Windows 8.1 (any Service Pack) Microsoft Windows 7 (Service Pack 1 (SP1)) - Before you install the A3200 software, run Windows Update a minimum of one time. Make sure that all of the updates complete. Other operating systems are not supported. 	
PCI/PCIe Expansion Port	A single open PCI or PCIe card slot is required to accommodate the required FireWire PCI or PCIe card for Aerotech's motion bus.	
Graphics Display	 Standard display adapter⁽⁶⁾ 1024 x 768 pixels or higher resolution 	
Hard Disk Space	500 MB available disk space	
IE	Internet Explorer 6 or later ⁽⁷⁾	
Required Peripherals	Keyboard, mouse and USB port	

- 1. A PC that has two physical processors is not supported. Use a PC with one processor and more than one physical core.
- 2. Intel Xeon processors based on the Intel Core 2 or Intel Core i3/i5/i7 architecture are supported. Intel Xeon processors based on older architectures are not supported.
- 3. A PC that has INtime configured is always limited to 32 cores, even when the PC has more than 32 physical cores.
- 4. Laptop computers are not supported. They can be used for offline debugging and simulation only. PCMCIA FireWire® cards are not supported.
- To avoid machine disruption, Aerotech disables automatic updates on Windows PCs that are shipped from Aerotech. To
 customize your update settings, refer to Microsoft's Windows documentation or Aerotech's <u>User Guide to Windows 10</u>
 <u>Updates</u>.
- 6. Aerotech recommends that you do not use high-end display adapters because they can cause interference with the A3200. Use a medium-performance onboard integrated graphics adapter or a medium-performance PCI express dedicated graphics card. For more information, refer to Optimizing PC Performance.

7. Internet Explorer is not included as part of the A3200 installation. If it is not installed on your computer, you must manually install it before you continue with the A3200 installation.

General Recommendations

- For steps to optimize the real-time environment on your PC, refer to Optimizing PC Performance, or to the A3200 software help file.
- Windows Audio can cause timing-related errors. To prevent possible problems, set the Sound Scheme in Control Panel to No Sounds.
- Do not use Dell OMCI (Open Manage Client Instrumentation) software with the A3200. Remove all OMCI software using Add/Remove Programs in Control Panel.
- The A3200 must have regular access to the PCI bus to operate correctly. Frame grabbers can use too much PCI bus bandwidth and cause communication errors or motion dropouts. To prevent errors and dropouts, use a dual PC (client/server) configuration.