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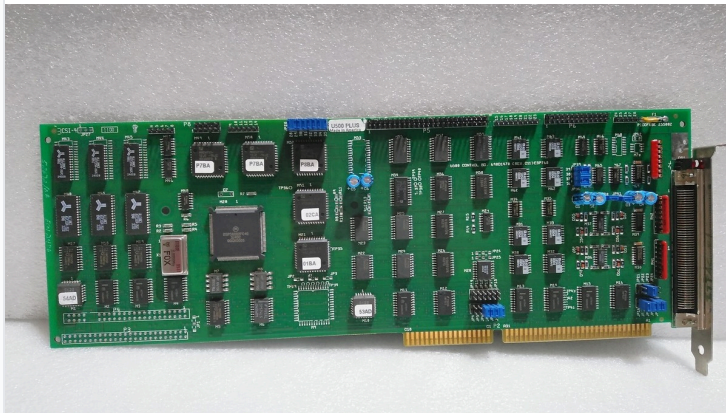
Data Sheet

August 15, 2026

AEROTECH

Aerotech U500PLUS-PCI

Aerotech Motion Controllers. Frequency Range: 10 MHz, Voltage / Current Range: 115V AC, 230V AC.



MODEL

**Aerotech
U500PLUS-PCI**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

U500PLUS-PCI

LISTING

<https://aumictechlabs.com/products/u500plus-pci-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Aerotech U500PLUS-PCI is a multi-axis motion controller card that connects directly to a host computer via PCI bus, enabling precision positioning and synchronized output control across multiple axes. The U500PLUS delivers high-speed motion control with a maximum tracking rate of 10 MHz in dual-axis firing mode, supporting up to four axes of amplifier and feedback connections through the BB500 Interface Board. This architecture allows integration with non-Aerotech drives and motors, making it adaptable to diverse automation environments.

Technical Specifications

Controller Type: Multi-axis motion controller card
Bus Interface: PCI
Maximum Axes: Four axes (via BB500 Interface Board)
Maximum Tracking Rate: 10 MHz (dual-axis firing mode)
Input Voltage Compatibility: 115V and 230V AC sources

Key Features

Position Synchronized Output (PSO) and laser firing support via J104 auxiliary connector
Flexible motor feedback interfaces: RS-422 encoders, absolute encoders, analog encoders, Hall-effect, thermistor, and brake outputs
Four axes of amplifier and feedback terminal blocks on BB500 Interface Board
High-speed user inputs and digital I/O capability through J104 connector
Encoder fault detection and end-of-travel limit

inputs Configurable internal or external power via BB500 jumper settings

Key Interfaces

Auxiliary I/O (J104): Encoder channels, PSO/laser firing, digital I/O, analog output, high-speed inputs

Motor Feedback (J103): Multiple encoder types, Hall sensors, thermistors, fault detection

BB500 Interface Board: Four-axis terminal blocks, power connector, three U500/U600 connectors, noise mitigation through metal enclosure mounting

Compatibility & Integration Compatible with IBM PC/AT systems featuring PCI slots, UNIDEX 500 Motion Controller software, and Windows platforms. The BB500 Interface Board enables connection to UNIDEX 600 controllers and third-party motor drives, eliminating dependency on proprietary amplifier ecosystems.

U500PLUSPCI Characteristics / Specifications

PARAMETER	VALUE
Model	U500PLUS-PCI
Instrument Type	PCI motion controller
Family	Aerotech U500 Plus
Host Bus	PCI
Manufacturer	Aerotech
Literature	Aerotech U500PLUS-PCI / U500 Plus listings
System Role	PC-based multi-axis motion
Use Case	stages, alignment, laser machining
Feedback Class	encoder feedback
Output Class	analog/stepper class axis drive commands
Form Factor	PCI add-in
Documentation Type	U500PLUS-PCI listing
Brand Lineage	Aerotech
Application Class	motion control
Related	U500 Plus family
Connector Class	axis I/O plus PCI
Host Class	PCI PC
Year Class	U500PLUS-PCI
Ate Class	motion controller
Module Class	PCI motion board
Axis Class	multi-axis (data sheet count)
Update Class	servo update (data sheet)
Software Class	Aerotech U500 software class
Stage Class	Aerotech linear/rotary stages

U500PLUSPCI Specifications

PARAMETER	VALUE
Key Features	Aerotech U500 Plus PCI motion controller
PCI host interface	Alignment and laser-machining axes
Technical Specifications	Model: U500PLUS-PCI

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

From Aerotech U500PLUS-PCI / U500 Plus listings. Axis count, servo-update rate, and encoder frequency are on the U500 Plus data sheet; do not invent them.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.