Supermicro SYS-E403-14B Cyber Flyaway Kits Overview

SYS-E403-14B Cyber Flyaway Kits are based on Mission Critical Flexible Building Blocks. Supermicro's SYS-E403-14B Mobile Edge Al/ML/HPC Server is the industry's highest performing edge AI server. With compelling price performance at 35 lbs easily fitting into any Airplane overhead bin as carry-on luggage. This provides easily maneuverable tech-on-wheels for a single warfighter to handle. The mobile edge performance extends to mobile clusters providing petaflops of GPU and petabytes of AI storage with 400GbE/s of inter-system connectivity.

Maximum Flexibility for Premium Mission Workloads

The Supermicro Cyber Flyaway Kits provide top tier AI and CPU Compute, Storage, and Networking all delivered in a compact, lightweight, durable TSA compliant case. At 35lbs, the Supermicro Cyber Flyaway Building Block Server when combined with a custom case, hits the requirements for delivering the highest performance in the industry in a package readily carried by a single warfighter.

Because the SYS-E403-14B fits into any standard airline overhead bin, security for the servers and data is enhanced because they remain near the war fighter responsible for the Flyaway Kits travel.

The incredible density of AI and CPU compute, storage capacity and network bandwidth reduces the total number of kits and cases required to travel and setup upon arrival.

SYS-E403-14Bs can be configured for maximum storage capacity (up to 500TB / server) or can be configured for a mixture of storage and Maximum GPU computation (240TB storage plus an NVIDIA H100-NVL) per server.



Air Travel To Edge



Al Building Block 2

GPU Optimized Config PCIe 5.0

- Min NVIDIA L40S/System 3X/Kit
- Maximum H100-NVL/System 3X/Kit



Storage Building Block 1

Storage Optimized Config PCIe 5.0

- 2.5" Up to 240TB/System 720TB/Kit
- AOC Up to 256TB/System 768TB/Kit
- Maximum 500TB/System 1.5 PB/Kit





Fits In Overhead Bin

Overview Example: 3X SYS-E403-14B Servers Per Kit CPU and Storage:

Advantages

Mobility

· Size Of Shoebox

· Weight 35 lbs.

- Custom Cut Pelican Case
- Rides Well In Airplane Overhead Bin

- Intel® Xeon® 6 processors with (128) E-cores, 225W, 1.0TB DDR5-6400
- 384 cores, 3.0TB DDR5-6400 / Kit

Networking: High Speed Optimized Config Dual 10Gb+

- 3X Dual 100GbE
- 3X 400GbE (1X 400GbE or 2X 200GbE)

SYS-E403-14B Optimized Kits of Edge Servers

Extreme Flexibility and Extreme Performance Across the Mission!

Cyber Flyaway Entry



- Intel® Xeon® 6 processors with (384)
 E-cores
- 1.5TB DDR5-6400 Memory
- 360TB NVMe
- (Optional L4 NVIDIA L40S GPU)
- 6X 10GbE
- 35lb X3 Pelican Cases

Cyber Flyaway GPU Optimized



- Intel® Xeon® 6 processors with (384)
 E-cores
- 3.0TB DDR5-6400 Memory
- 360TB 720TB NVMe
- 3X NVIDIA L40S 3X H100 NVL GPU
- NVIDIA ConnectX®-7 400GbE Network
- 35lb X3 Pelican Cases

Cyber Flyaway Storage Optimized



- Intel® Xeon® 6 processors with (384)
 E-cores
- 3.0TB DDR5-6400 Memory
- 60TB 2.5" 720TB 2.5" NVMe
- 768TB NVMe AOC
- NVIDIA Bluefield®-3 DPU 400GbE Network
- 35lb X3 Pelican Cases
- 3X 500TB / Server
- 1.5PB / Kit

Military Workloads for SYS-E403-14B Edge Clusters

- Virtualized workloads include Endpoint Detection and Response (EDR), Security Orchestration Automation and Response (SOAR), Forensic Analysis, Vulnerability Scanning, and Fully Homomorphic Encryption at the Edge.
- By providing enhanced computational power at the edge, this solution uniquely boosts the efficiency of critical mission operations such as Vulnerability Assessment, Security Monitoring, and Incident Response.
- Military equipment repair with Augmented Reality. Unleash the potential of Augmented Reality AR in immersive technology capability for scaling AR use cases, enhancing AR apps, and streamlining equipment training and engineering.
- An example of edge computing is real-time data analytics on the battlefield, such as soldier-worn sensors processing data locally to make immediate decisions. The term "tactical edge" further emphasizes characteristics of this environment, including right on the front lines or in remote and disconnected locations where time-sensitive computation is needed, and communications may be intermittent.
- Data privacy and improved security: Processing sensitive data locally limits the potential for data breaches during data transmission. Cybersecurity tools can use edge AI to help spot probing patterns before full-scale attacks develop. Once an attack begins, AI close to the point of the cyberattack can guide system and network responses to mitigate damage faster than human personnel can respond.
- Greater reach and operational flexibility: Without the need for constant connectivity to data centers or cloud access, soldiers can process and analyze data even in the most remote locations.

Visit the Supermicro website at SYS-E403-14B-FRN2T or contact sales@supermicro.com for more details