

DC-MHS Servers for Private Cloud Deployments and AI Workloads

EAS Series



Overview

As enterprises navigate the evolving cloud infrastructures, the demand for robust on-premises computing resources remains crucial. Traditional server platforms often struggle to meet the modern imperatives of AI workloads, advanced virtualization, centralized orchestration, and future-proof expandability, posing significant challenges for IT and data center teams. The complexity of integrating and managing compute, storage, and network elements at scale further compounds these difficulties.

EnGenius addresses these challenges with the EnGenius EAS2210 (2U) and EAS1210 (1U) Data Center Servers. These enterprise-grade, modular platforms are specifically designed to meet the rigorous demands of private cloud and edge data centers. Built on the Open Compute Project (OCP) DC-MHS standard and powered by the latest Intel® Xeon® 6 processors, EnGenius EAS Servers deliver exceptional compute density, advanced AI acceleration, and flexible options for storage and networking.

The solution is further enhanced by the license-free EnGenius Data Center Controller (EDCC), which provides centralized management, remote diagnostics, and seamless scalability across your infrastructure. EnGenius EAS Series Servers empower enterprises with a next-generation foundation, unifying compute, storage, and out-of-band management to create a cost-effective, scalable, and future-ready infrastructure for data-driven operations.

Features & Benefits

Optimized for Private:

- Delivers the compute density required for on-premises infrastructure.
- Provides performance for demanding virtualization and containerization.

AI & HPC Ready:

- Intel® Xeon® 6 processors optimized for performance-intensive or energy-efficient workloads.
- PCIe Gen5 expansion for high-bandwidth GPU and SmartNIC integration.
- Integrated Intel AMX and DL Boost for accelerated AI training and inference.

Flexible & Future-Proof Infrastructure:

- Based on OCP DC-MHS standard with modular design and multi-vendor compatibility.
- Supports up to 24 hot-swappable U.2 NVMe drives.
- Up to 8 PCIe Gen5 slots with CXL 2.0 support and OCP NIC 3.0 interface.

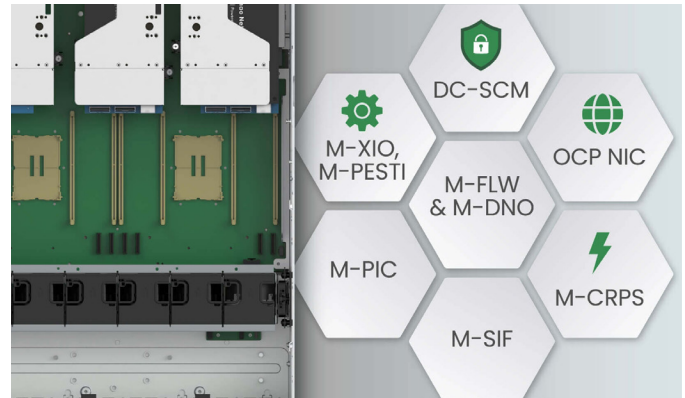
Centralized, License-Free Management:

- EnGenius Data Center Controller (EDCC) provides comprehensive and centralized management.
- Enables remote monitoring, firmware updates, diagnostics, and rack-level topology visualization.
- Eliminates additional software licensing costs.

Modular Compute Technologies Built for Cloud, AI, and Edge Agility

Modular DC-MHS Standard

EnGenius EAS Servers, built on the OCP DC-MHS standard, offer a flexible and vendor-neutral server ecosystem. This open-platform design enhances interoperability and simplifies the entire server lifecycle. By streamlining component integration and standardizing upgrade pathways, it reduces total cost of ownership and enables IT teams to deploy systems quickly and scale seamlessly, without the constraints of vendor lock-in.



Powered by Intel® Xeon® 6 Processors

The EAS servers feature the latest Intel® Xeon® 6 processors, delivering high compute density and energy efficiency. With support for up to 86 P-cores or 144 E-cores, the platform accelerates AI workloads, high-performance computing, and large-scale virtualization.



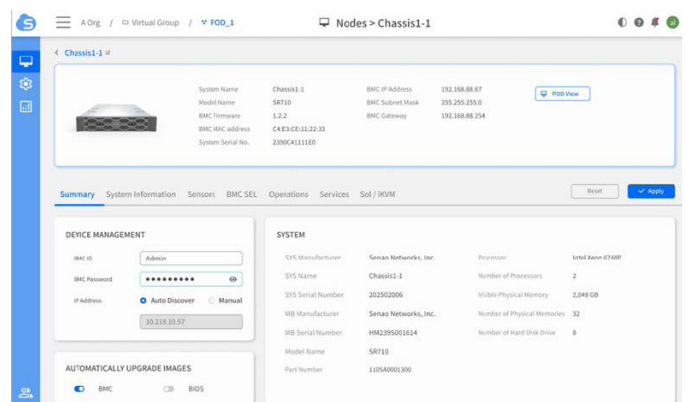
Enhanced performance with PCIe Gen 5 expansion

EAS supports up to 8 PCIe Gen5 slots for high-bandwidth expansion. The platform enables integration of accelerators such as the ESN904 SmartNIC with dual 25GbE ports, offloading CPU workloads, and optimizing performance for SDN, cloud, and virtualized environments.



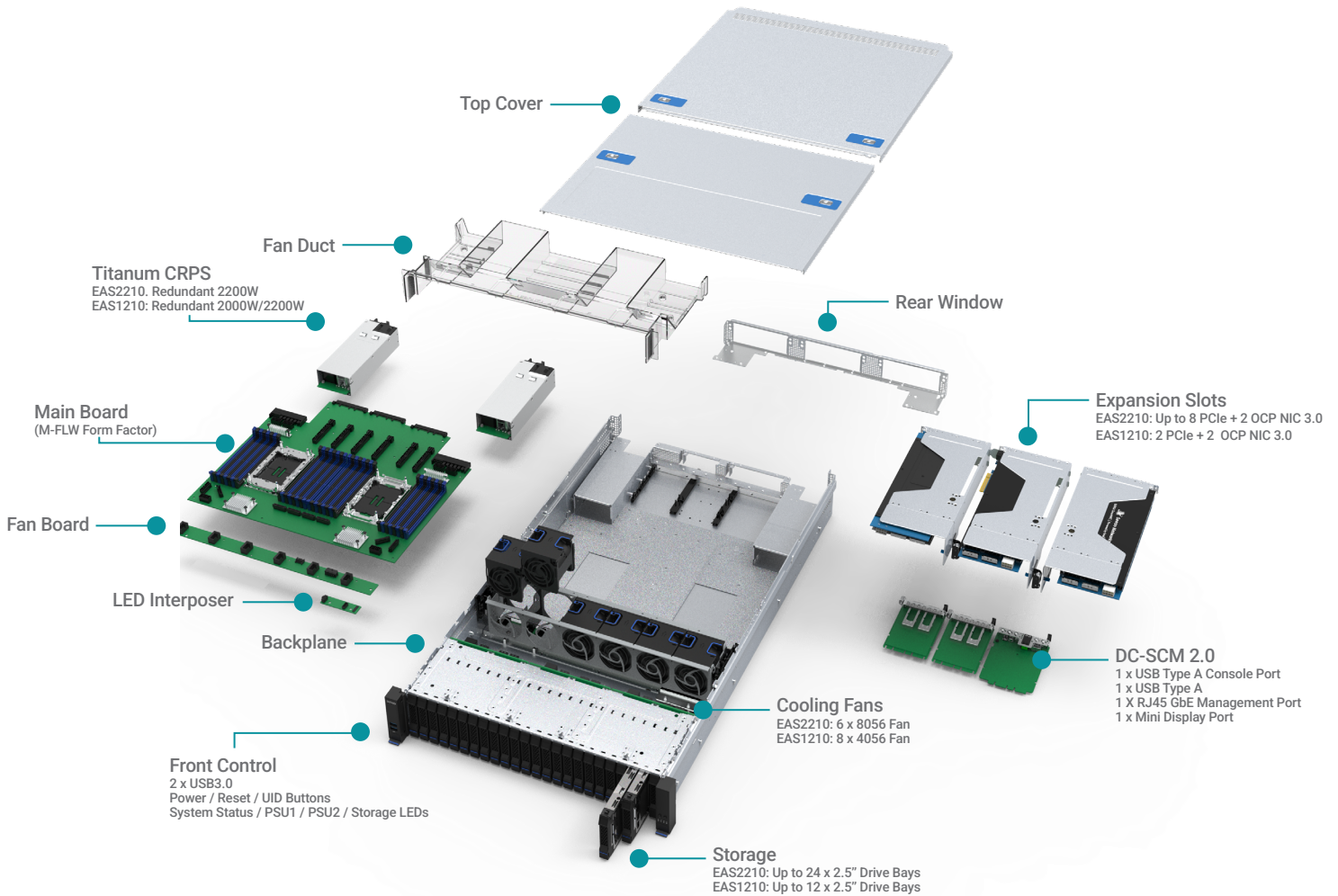
Unified Management with EnGenius Data Center Controller (EDCC)

Seamlessly integrated with the license-free EDCC, this out-of-band management solution primarily aims to simplify the entire server lifecycle. It offers centralized control, remote diagnostics, and unified firmware updates across your fleet, significantly reducing operational complexity.



Modular Design for Efficient Deployment and Maintenance

The EnGenius EAS Series adopts a fully modular, DC-MHS-compliant architecture, designed to simplify component servicing and support scalable infrastructure deployment. This design streamlines server installation, upgrades, and maintenance, enabling IT teams to expand infrastructure efficiently while minimizing operational complexity and downtime.



Hot-Swappable Components for Maximum Uptime

Critical hardware elements, such as CRPS redundant power supplies and high-performance cooling fans, are engineered for service and hot-swappable replacement. This ensures continuous availability and rapid repair without system interruption.

Intelligent Cooling and Unobstructed Airflow

The server chassis features an optimized front-to-rear airflow path and strategic fan layout, efficiently dissipating heat from high-power components like dual Intel Xeon CPUs and PCIe-based accelerators. Thermal performance is maintained even under sustained heavy workloads.

Modular Upgrades to Meet Evolving Needs

Built on a modular backbone, the EAS Series enables quick integration of new components—such as GPUs, SmartNICs, or updated power modules—without replacing the entire system. This future-ready design supports incremental scaling and long-term infrastructure agility.

Architected for Performance-Driven Workloads

The EnGenius EAS Series delivers a high-performance compute foundation, designed for diverse data center environments. Its optimized architecture combines processing power, high-speed memory, and scalable expansion, supporting workloads such as virtualization, AI inference, and private cloud infrastructure.

Xeon 6

Scalable Compute and Memory Architecture

Powered by dual Intel® Xeon® 6 processors, the EAS Series supports up to 144 cores to tackle multi-threaded, compute-intensive workloads. With 32 DIMM slots and DDR5 memory, the platform delivers high memory bandwidth and up to 8TB capacity—ideal for large-scale virtualization, databases, and AI inference.

PCIe Gen5

High-Speed I/O and Low-Latency Storage

Featuring PCIe Gen5, CXL 2.0, and the OCP 3.0 interface, the EAS platform delivers the bandwidth required for modern accelerators and high-performance storage. Up to 8x PCIe Gen5 slots enable integration of GPUs, SmartNICs, and AI cards, while support for hot-swappable U.2 NVMe SSDs ensures ultra-low-latency data access.

DC-MHS

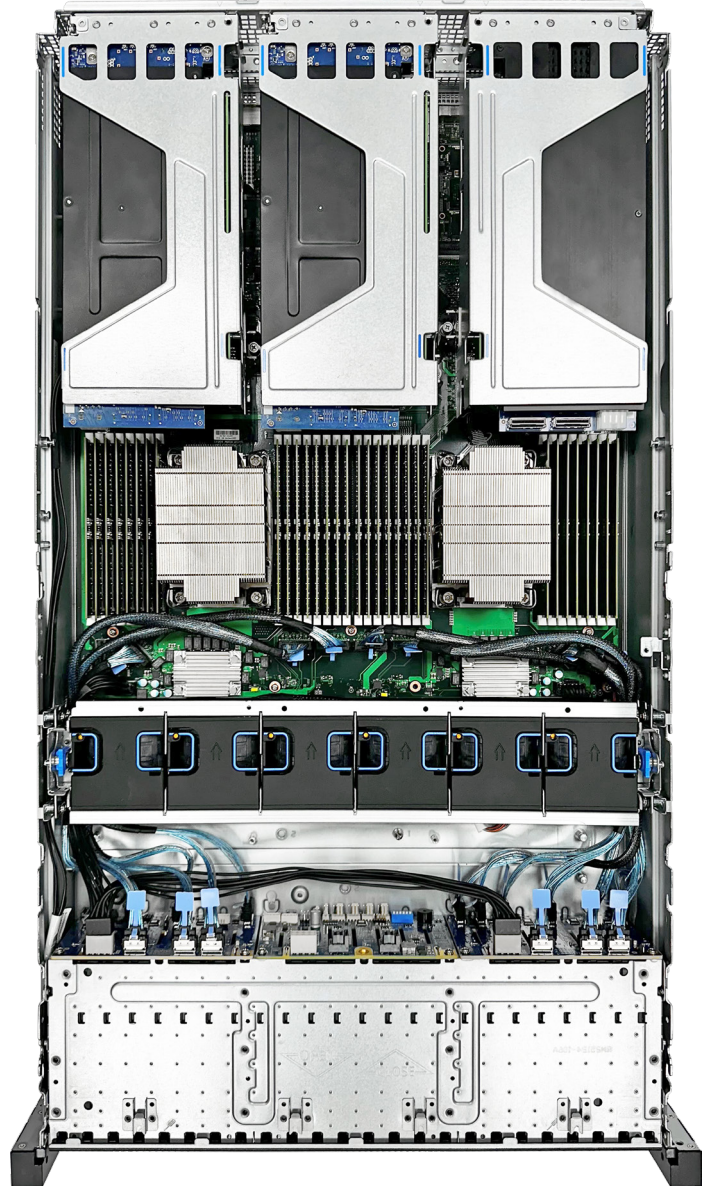
OCP DC-MHS Modular Architecture

The EAS Series architecture offers a robust foundation for high-density, serviceable infrastructure. Standardized interfaces for CPUs, memory, and I/O simplify integration and upgrades. While hot-swappable support is supported for storage and power modules, the modular design enables gradual hardware evolution without disruptive forklift changes.

AI Boost

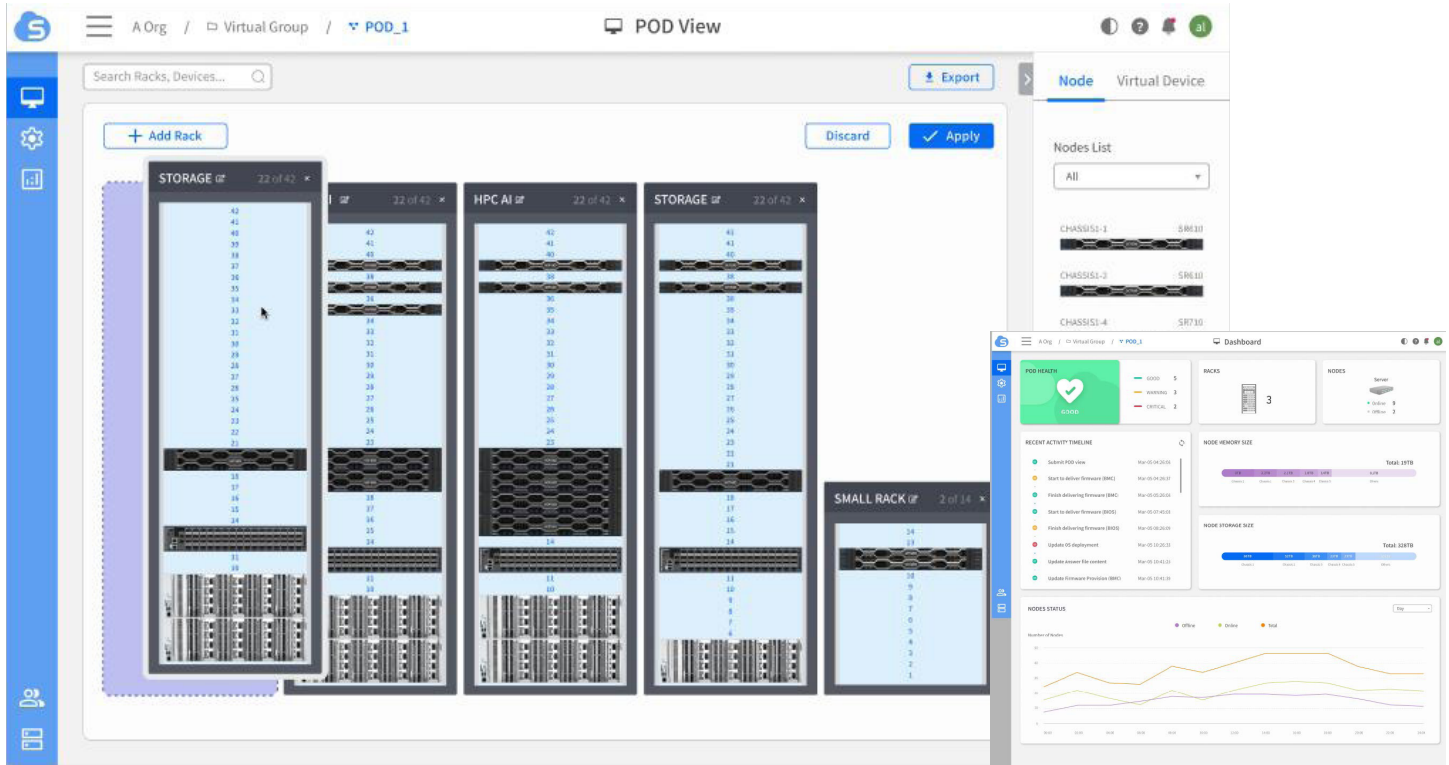
Built-in AI Acceleration for Inference and Training

Intel Advanced Matrix Extensions (AMX) and DL Boost are natively supported, delivering accelerated deep learning performance for AI inference and model training—making the EAS Series ideal for edge AI and real-time analytics workloads.



EnGenius Data Center Controller Centralized Management

The EnGenius Data Center Controller (EDCC) is the cornerstone of simplified, efficient management for your EnGenius EAS Series Servers. This powerful, license-free platform provides comprehensive out-of-band management capabilities, empowering IT teams with unparalleled control and visibility over their entire server fleet from a single interface.



Simplified Firmware Updates

Push unified firmware updates to multiple servers simultaneously, ensuring consistency and reducing maintenance overhead.

Visual POD View

Gain a physical-to-logical view of server groupings with intuitive POD visualization, enabling more efficient resource mapping, configuration, and infrastructure monitoring.

Out-of-Band Control

Manage servers even if the operating system is unresponsive or powered off, ensuring continuous uptime and remote troubleshooting.

Remote Diagnostics & Troubleshooting

Gain real-time insights into server health, performance metrics, and system logs, enabling proactive issue identification and rapid resolution from anywhere.



Unified Device Management

Centralized control over all EAS servers, eliminating the need for individual server access.

Scalable Deployment

Designed to manage a growing number of servers, providing seamless scalability as your data center expands.

Technical Specifications

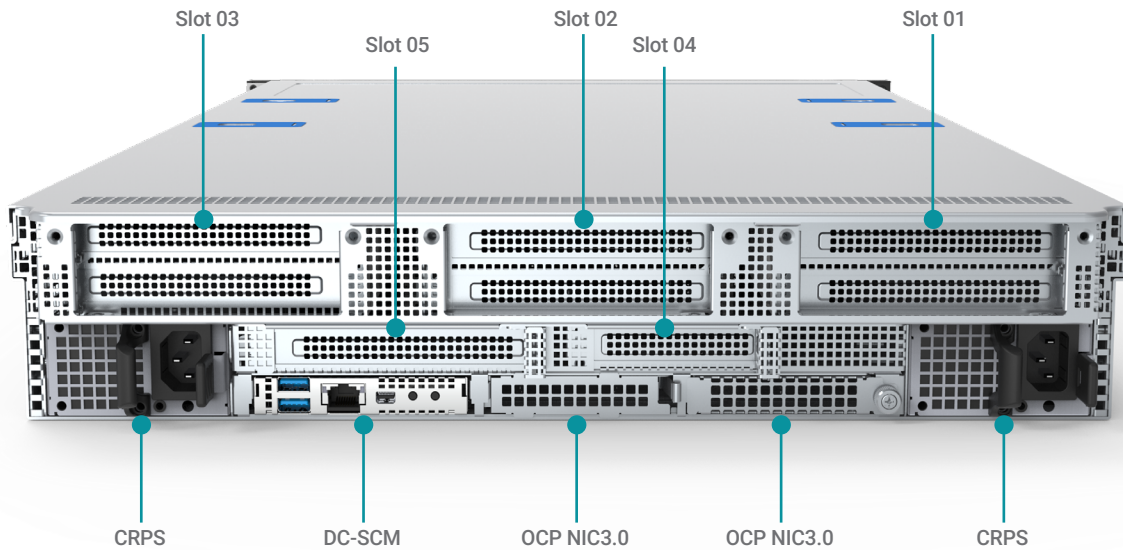
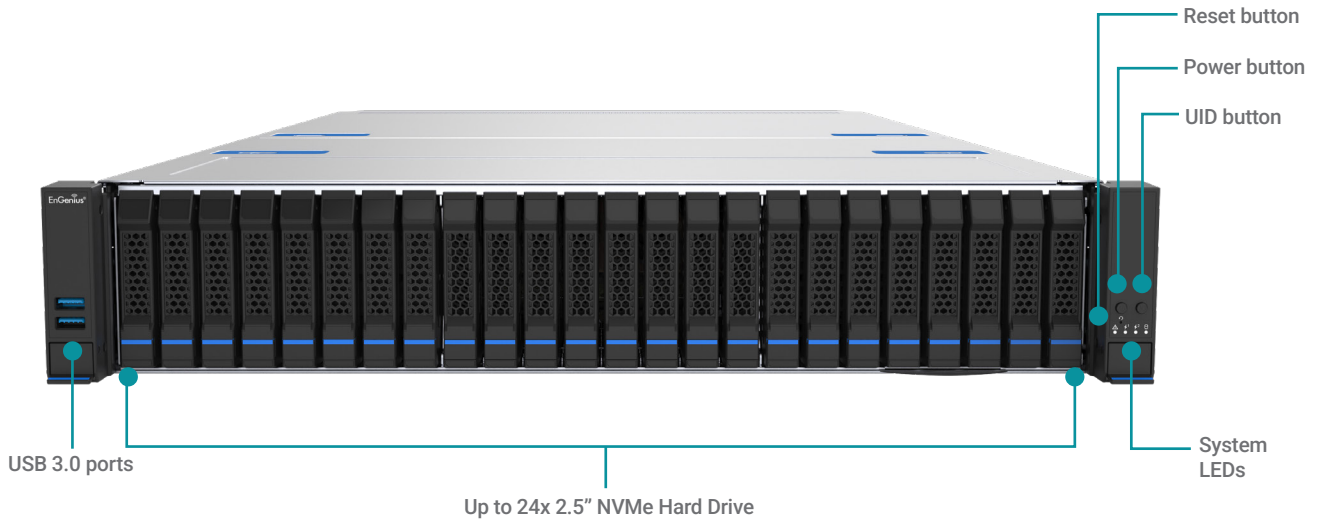
Servers		
		
Model Name	2U Data Center Server	1U Data Center Server
Model Number	EAS2210	EAS1210
Form Factor	2U Rackmount	1U Rackmount
Processor	Intel Xeon 6 (6500/6700 Series) P Core: Up to 144 E Core: Up to 86 Dual processor, TDP up to 350W	Intel Xeon 6 (6500/6700 Series) P Core: Up to 144 E Core: Up to 86 Dual processor, TDP up to 350W
Socket Type	2 x LGA4710	2 x LGA4710
Memory	Slot Count: 32 DIMM slots (16 DIMMs per CPU) DDR5 ECC RDIMM 6400MT/s 1DPC 5200MT/s 2DPC Capacity: 8TB with 256 GB DDR5	Slot Count: 32 DIMM slots (16 DIMMs per CPU) DDR5 ECC RDIMM 6400MT/s 1DPC 5200MT/s 2DPC Capacity: 8TB with 256 GB DDR5
Drive Bays	Up to 24x 2.5"NVMe PCIe Gen5 Hot-Swap drive bays Intel VROC Key Header	Up to 12x 2.5"NVMe PCIe Gen5 Hot-Swap drive bays Intel VROC Key Header
System Cooling	Air Cooling 6 x Smart FAN (60 x 60 x 56 mm)	Air Cooling 8 x Smart FAN (40 x 40 x 56 mm)
Expansion Slot	Rear: 3x PCIe Gen5 x16 FH3/4L with Double Width or 6x PCIe Gen5 x8 FH3/4L with Single Width 1x PCIe Gen5 x8 HHHL 1x PCIe Gen5 x16 FHHL 2x OCP3.0 x8 SFF	Rear: 1x PCIe Gen5 x8 HHHL 1x PCIe Gen5 x16 FHHL 2x OCP3.0 x8 SFF
I/O Port	Front: 2x USB3.0 Type A Rear: 1x USB3.0 Type A for BMC 1x Mini Display for BMC 1x USB3.0 Console for BMC 1x MGNT GE for BMC	Front: 2x USB3.0 Type A Rear: 1x USB3.0 Type A for BMC 1x Mini Display for BMC 1x USB3.0 Console for BMC 1x MGNT GE for BMC
Power Supply	M-CRPS 2200W, per PSU model 80 Plus Titanium Level (96%) 2x Hot Swap Redundant AC Input 110V - 240V	M-CRPS 2000W/2200W, per PSU model 80 Plus Titanium Level (96%) 2x Hot Swap Redundant AC Input 110V - 240V
Security	Trusted Platform Module(TPM) 2.0 Platform Firmware Resilience (PFR) 4.0 Intrusion Detection (Open Chassis Cover)	Trusted Platform Module(TPM) 2.0 Platform Firmware Resilience (PFR) 4.0 Intrusion Detection (Open Chassis Cover)
Chassis	Dimension (W x D x H):438 x 790 x 88 (mm) Weight: around 25KG	Dimension (W x D x H):438 x 790 x 44 (mm) Weight: around 18KG
Environment	Operating Temperature: 10°C to 35°C Storage Temperature: -20°C ~60°C Relative Humidity: 10%~90% (Non-Condensing)	Operating Temperature: 10°C to 35°C Storage Temperature: -20°C ~60°C Relative Humidity: 10%~90% (Non-Condensing)

Technical Specifications

<p>System Management</p>	<p>IPMI 2.0 Management Redfish Management HTTPS Web Management IPv4/ IPv6 Address Dashboard Hardware Sensor Monitor KVM console Serial over LAN Virtual Media Firmware Upgrade(BMC/BIOS) Event Log & Alert (SMTP/ SNMP/Syslog) LDAP/ Windows AD/ Radius User Account Management System Firewall (IP Access Control) Hardware Root of trust (RoT) Backup & Restore Configuration Protocol support: SNMP, SMTP, DHCP, NTP, DNS, Dynamic DNS Intel Platform Feature: Platform Firmware Resilience (PFR), Autonomous Crash Dump (ACD), At-Scale Debug (ASD)</p>	<p>IPMI 2.0 Management Redfish Management HTTPS Web Management IPv4/ IPv6 Address Dashboard Hardware Sensor Monitor KVM console Serial over LAN Virtual Media Firmware Upgrade(BMC/BIOS) Event Log & Alert (SMTP/ SNMP/Syslog) LDAP/ Windows AD/ Radius User Account Management System Firewall (IP Access Control) Hardware Root of trust (RoT) Backup & Restore Configuration Protocol support: SNMP, SMTP, DHCP, NTP, DNS, Dynamic DNS Intel Platform Feature: Platform Firmware Resilience (PFR), Autonomous Crash Dump (ACD), At-Scale Debug (ASD)</p>
<p>Central Management</p>	<p>EnGenius Data Center Controller</p>	<p>EnGenius Data Center Controller</p>

Hardware Overview

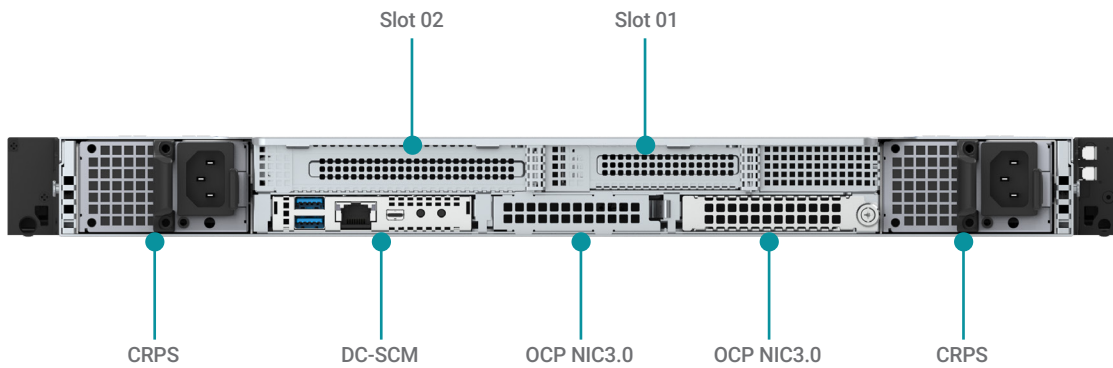
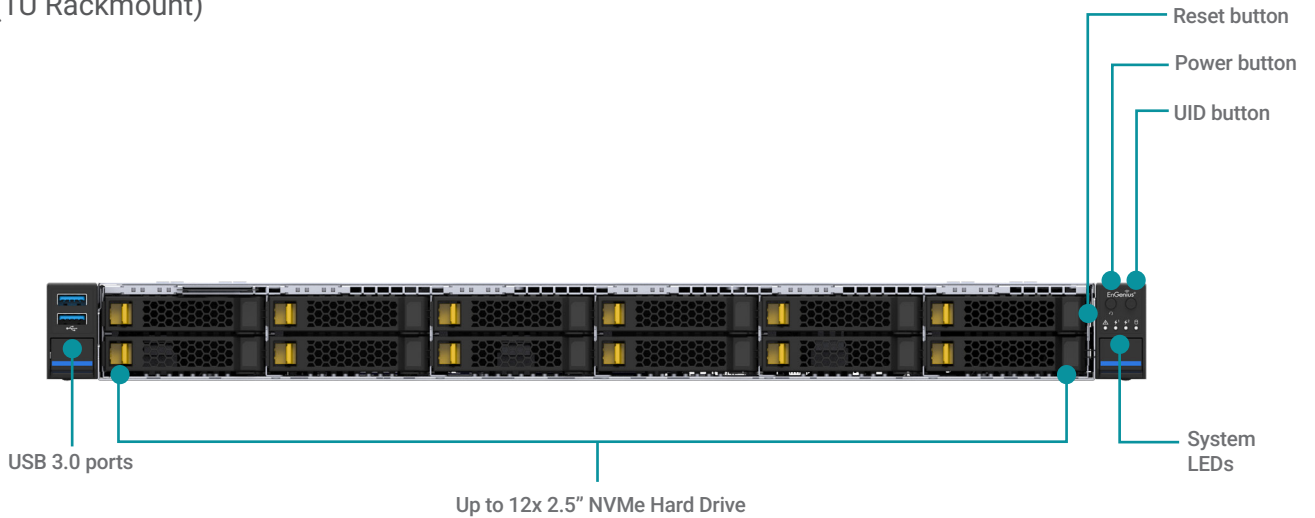
EAS2210 (2U form factor)



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| <p>DC-SCM:
 1 x USB Type A (Console)
 1 x USB Type A
 1 x RJ45 GbE MGMT Port
 1 x Mini Display Port</p> | <p>Slot 01~05:
 Slot01~Slot 03: 2 different config
 - Config 1: 3 x PCIe 5.0x16 for Double Width, FH 3/4L
 - Config 2: 6 x PCIe 5.0 x8, FH 3/4L
 Slot04: PCIe 5.0 x8, FHHL
 Slot05: PCIe 5.0x16, FHHL</p> |
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Hardware Overview

EAS1210 (1U Rackmount)



DC-SCM:
 1 x USB Type A (Console)
 1 x USB Type A
 1 x RJ45 GbE MGMT Port
 1 x Mini Display Port

Slot 01~02:
 Slot01: PCIe 5.0 x8, HHHL
 Slot02: PCIe 5.0x16, FHHL

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