

2U DC-MHS Server with Dual Intel® Xeon® 6 Processors

S21

EnGenius S21 is a 2U DC-MHS server powered by Intel® Xeon® 6 processors. Designed for AI, big data, and storage-intensive private cloud deployments, it supports up to 24x U.2 hot-swappable NVMe SSDs and 8x PCIe Gen5 expansion slots for GPU and SmartNIC integration. With the P-core/E-core architecture and centralized EDCC management, S21 delivers outstanding compute density and flexibility for modern data centers.



Performance

Scalable Compute

Dual Intel® Xeon® 6 with P-core/E-core architecture handles mixed AI and cloud workloads.

Storage

High-Density NVMe

Up to 24x 2.5" U.2 NVMe PCIe Gen5 hot-swap bays with Intel VROC support.

DC-MHS

OCP Modular Architecture

DC-MHS design with 2x OCP 3.0 slots keeps infrastructure serviceable and upgradable.

Management

Centralized EDCC Control

Redfish-based management via the EnGenius Data Center Controller.

Memory

8TB DDR5 Capacity

Up to 32x DDR5 ECC RDIMM running at 6400 MT/s across both processors.

Expansion

Gen5 Acceleration

Up to 8x PCIe Gen5 expansion slots host GPUs and SmartNICs.

Scalability

CXL 2.0 Ready

CXL 2.0 support enables future-ready memory and device expansion.

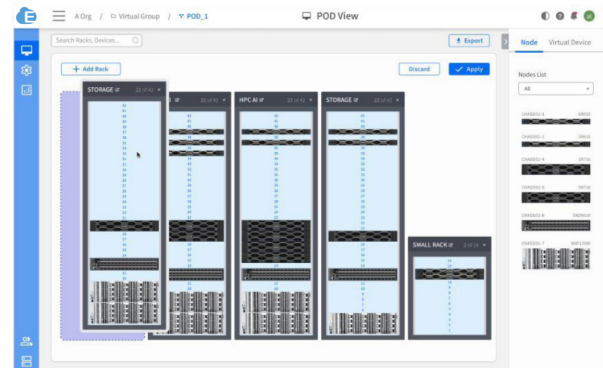
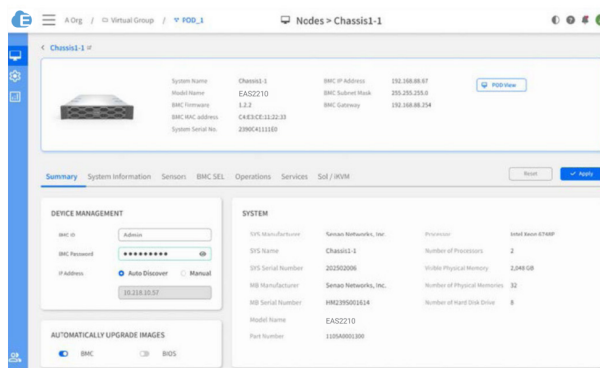
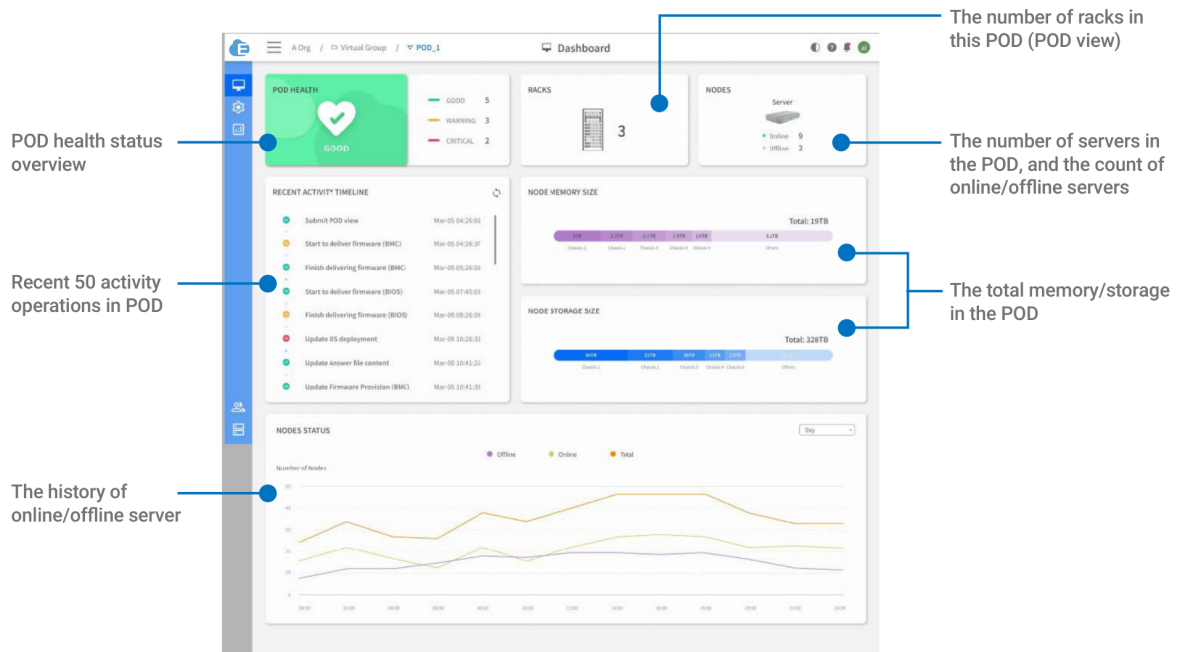
Reliability

Titanium Redundant Power

M-CRPS 2200W at 96% Titanium efficiency with hot-swap redundancy.

EnGenius Data Center Controller Centralized Management

The EnGenius Data Center Controller (EDCC) is the cornerstone of simplified, efficient management for your EnGenius data center 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.

Out-of-Band Control

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

Unified Device Management

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

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.

Remote Diagnostics & Troubleshooting

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

Scalable Deployment

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

Technical Specifications

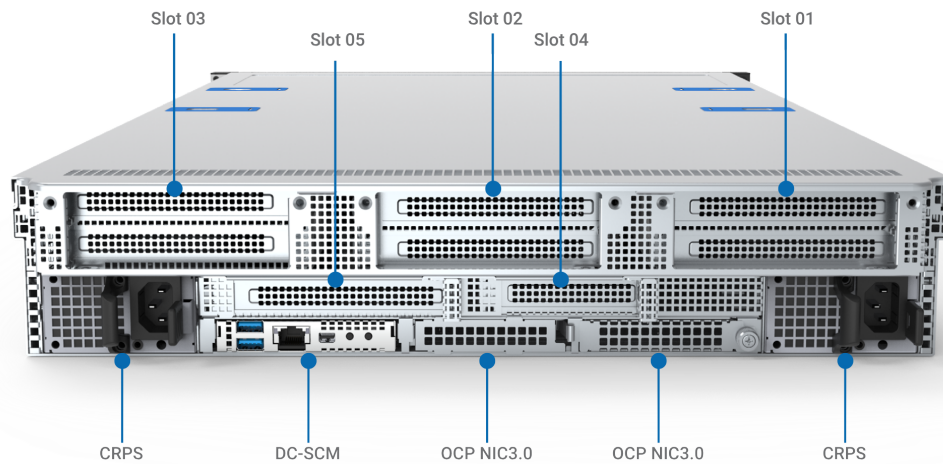
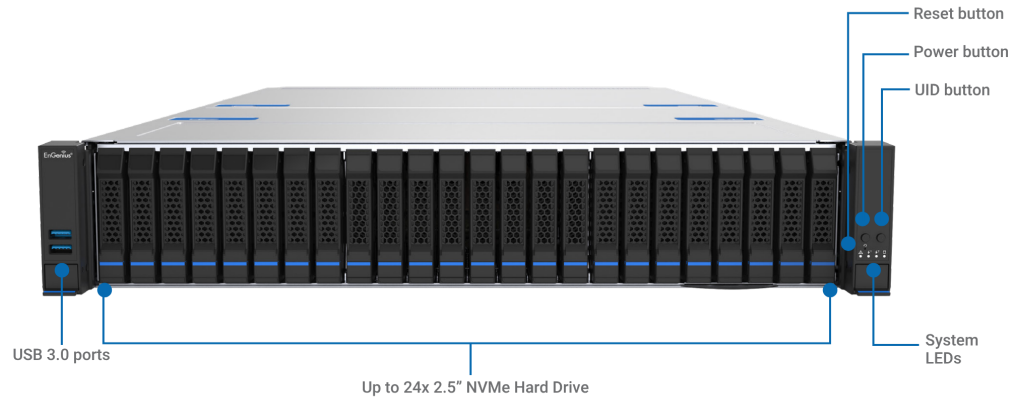
EnGenius AI Server	
Model Name	2U Data Center Server
Model Number	S21
Form Factor	2U Rackmount
Processor	Intel Xeon 6 (6500/6700 Series) P Core: Up to 144 E Core: Up to 86 Dual processor, TDP up to 350W
Socket Type	2 x LGA4710
PCH Chipset	No
Memory	Slot Count: 32 DIMM slots (16 DIMMs per CPU) DDR5 ECC RDIMM 6400MT/s 1DPC 5200MT/s 2DPC Capacity: 8TB with 256 GB DDR5
Drive Bays	Up to 24x 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)
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
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
Power Supply	M-CRPS 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)
Chassis	Dimension (W x D x H):438 x 790 x 88 (mm) Weight: around 25KG

Technical Specifications

Environment	Operating Temperature: 10°C to 35°C Storage Temperature: -20°C ~60°C Relative Humidity: 10%~90% (Non-Condensing)
System Management	IPMI 2.0 Management Redfish Management HTTPS Web Management IPv4/ IPv6 Address Dashboard Hardware Sensor Monitor KVM console Serial over LAN Virtual Media Firmware Upgarde(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),
Central Management	EnGenius Data Center Controller

Hardware Overview

S21 (2U Data Center Server)



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 01~05:

- Slot01~Slot 03: 2 different config
- Config 1: 3 x PCIe 5.0x16 for Double Width, FH 3/4L
- Config 2: 6 x PCIe 5.0x 8, FH 3/4L
- Slot04: PCIe 5.0 x8, HHHL
- Slot05: PCIe 5.0x16, FHHL



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