



# SUPERMICRO GOLD SERIES

Proven Large Scale Customer Solutions Delivering  
Unrivalled Performance, Efficiency, and Quality

**New X13, H13 and H100 Systems**



# INTRODUCING GOLD SERIES SOLUTIONS

*Proven Systems Deployed at Scale*

Supermicro Gold Series are our most popular configurations, with proven track records in large-scale deployments by some of our biggest customers. Get complete, installation-ready systems in validated, copy-exact configurations for workloads at any scale and without the need for complex customization or validation.

- Proven use cases working in real-world at-scale deployments
- Ready-to-ship systems available with short lead times from our global warehouses
- Fast deployment with reduced testing times before and after deployment
- Rack scale PnP for immediate plug & play (4000 racks/month capacity in US)



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# Gold Series AI, ML and HPC

## Supermicro Delta-Next GPU | SYS-821GE-TNHR (8U)

### Next-Generation 8-GPU Systems for AI, ML and HPC

Supermicro X13 8U GPU systems are optimized for maximum power and performance, ready to tackle the most intensive workloads with up to 9x performance gains compared to the previous generation. These top-of-the-line servers support next-generation NVIDIA H100 8-GPU accelerators (code-named Delta-Next), NVLink and NVSwitch interconnects, enhanced thermal capacity to support up to 700W per GPU and optional direct-to-chip CPU liquid cooling.

Designed with flexibility in mind, Supermicro 8U 8-GPU systems are available in both front and rear I/O configurations to suit a range of installation environments, support AC and DC power in standard and OCP (Open Compute Project) DC rack configurations and include hot-swappable, tool-less components to maximize serviceability.



SYS-821GE-TNHR (8U)

### Key Features

- Most comprehensive AI building block platform
- Supercharged for the largest workloads with next-generation architecture
- All set to break through the barriers of AI at scale
- Powered by NVIDIA HGX H100 8 SXM5 GPUs up to 700W TDP
- 9X more performance, 2X faster networking, and high-speed scalability
- AIOM Slot (OCP 3.0 compliant) support
- Optional Liquid Cooling support

MODEL	SYS-821GE-TNHR (8U)
CPU	• Dual 4th Gen Intel® Xeon® Scalable processors supported
GPU	• NVIDIA® HGX™ H100 8-GPU
Memory	• 8TB DDR5-4800 in 32 DIMMs per node
Storage	• Up to 20x 2.5" hot-swap NVMe/SATA drive bays; 8x 2.5" NVMe dedicated
Networking	• Up to 400G NDR InfiniBand per GPU



# Gold Series AI and Metaverse

## Supermicro PCIe GPU SuperServer | SYS-521GE-TNRT (5U) / SYS-421GE-TNRT/TNRT3 (4U)

### High Performance and Flexibility for AI, 3D Simulation and Metaverse

Optimized for the next generation of HPC, action-oriented AI, 3D simulation, and advanced graphic design and rendering, Supermicro X13 PCIe accelerated solutions empower the creation of 3D worlds, digital twins, 3D simulation models and the Metaverse.



SYS-521GE-TNRT (5U)



SYS-421GE-TNRT/TNRT3 (4U)

### Key Features

- Dual 4th Gen Intel® Xeon® Scalable processors
- Support for the latest industry standards including PCIe 5.0, DDR5 and Compute Express Link (CXL) 1.1
- Configured with 8 NVIDIA H100 GPUs and 2 CX6 DPUs
- Optional 1U expansion for enhanced thermal capacity
- Flexible storage with U.2 NVMe and optional direct-to-CPU storage configurations
- Dual root (TNRT) and direct-connect (TNRT3) PCIe configurations available

### CONFIGURATION **SYS-521GE-TNRT (5U)**

CPU	• Dual 4th Gen Intel® Xeon® Scalable processors
GPU	• 8x NVIDIA H100 80GB PCIe
Memory	• 2TB DDR5-4800 in 32 DIMMs
Storage	• 8x 2.5" hot-swap 3.84TB NVMe SSDs
Boot Drives	• 2x 480GB M.2 SSD
Networking	• 2x 200G HDR InfiniBand NICs + 1 Dual-port 10GbE NIC



# Gold Series Media and 3D Environments

## Supermicro 4U 8 PCIe GPU Server | AS-4125GS-TNRT

### Media and 3D Environments including Metaverse and Omniverse Applications

GPU-optimized system providing maximum acceleration, flexibility, and balance for AI, deep learning, and HPC applications, Supermicro H13 PCIe accelerated solutions empower the creation of 3D worlds, digital twins, 3D simulation models, Omniverse and Metaverse.



AS-4125GS-TNRT



Front View



Rear View

### Key Features

- Dual socket 4th Gen AMD EPYC™ 9004 series processors
- Support for the latest industry standards including PCIe 5.0, DDR5 and Compute Express Link (CXL) 1.1
- Configurable with the latest GPUs, including AMD Instinct™ MI210 and NVIDIA® H100
- Flexible storage with U.2 NVMe and optional direct-to-CPU storage configurations
- Direct-connect PCIe configurations available

MODEL	AS-4125GS-TNRT
CPU	• Dual 4th Gen AMD EPYC™ 9004 Series Processors
GPU	• 8x NVIDIA L40/ NVIDIA H100 80GB
Memory	• 6TB DDR5-4800 in 24 DIMMs
Storage	• 4x 2.5" hot-swap NVMe SSDs
Boot Drives	• 1x M.2 NVMe boot drive
Networking	• Dual-port 10GbE NIC with 1 AIOM/DCP 3.0 slot



# Gold Series Cloud, HPC, Enterprise

## Supermicro SuperBlade® | SBI-421E (Blade)

### Ultra-dense and maximum performance with 20 dual-socket blades (single-wide) in 8U

Supermicro's 8U SuperBlade is optimized for performance, density and advanced networking. With up to 20 nodes in an 8U chassis and both air and liquid cooling options available, each node occupies just 0.4U of rack space, delivering unprecedented compute density. The modular resource-saving architecture utilizes shared power and cooling to reduce power consumption and allow modular refresh of subsystems, reducing e-waste and TCO.



8U SuperBlade®



SBI-421E (Liquid Cooled Blade)



### Key Features

- Dual 4th Gen Intel® Xeon® Scalable processors with air and liquid cooling options supporting up to 350W TDP
- 16 DIMM slots per node
- 1x OCP 3.0 network card (e.g. 400G NDR IB)
- 200G HDR IB and dual 25GbE via mezzanine card
- Up to 8 drives in total

MODEL	20x SBI-421E (single-wide) in 8U Enclosure
CPU	• Dual 4th Gen Intel® Xeon® Scalable processor per node
Memory	• 4TB DDR5-4800 in 16 DIMMs per node
Storage	• 3x 2.5" hot-swap U.2 and up to 5x M.2 drives
Networking	• OCP 3.0 networking card, 200G HDR IB and dual 25GbE via mezzanine card, dual 25GbE LOM

# Gold Series AI, Data Analytics, HPC

## Supermicro SuperBlade® | SBI-611E (Blade)

### Maximum performance and versatile architecture with up to 10 single-socket blades (single-wide) in 6U

Supermicro's 6U SuperBlade architecture is optimized to provide maximum power for compute-intensive workloads. The hot-swappable blade supports NVIDIA H100 GPUs, and up to 4x GPU per double-wide blade, for accelerated performance. It also supports PCIe networking options and E1.S drives for a truly versatile architecture. The modular resource-saving architecture utilizes shared power and cooling to reduce power consumption and allow modular refresh of subsystems, reducing e-waste and TCO.



6U SuperBlade®

SBI-611E Blade with 2 GPUs

### Key Features

- Single 4th Gen Intel® Xeon® Scalable processor with air and liquid cooling options supporting up to 350W TDP
- 16 DIMM slots per CPU
- Support up to 4x GPUs for workload acceleration
- Up to 5 drives

MODEL	10x SBI-611E (Single-Wide) in 6U Enclosure
CPU	• Single 4th Gen Intel® Xeon® Scalable processor per node
Memory	• 4TB DDR5-4800 in 16 DIMMs per node
Storage	• 2x 2.5" hot-swap U.2 and up to 3x M.2 drives per node
GPU	• 2x single-width GPU per node
Networking	• Standard IB or GbE PCIe cards, dual 25GbE via mezzanine card and dual 25GbE LOM



# Gold Series High Performance Enterprise Supermicro 1U Hyper | AS-1125HS-TNR

## Best-in-class Performance and Flexibility Rackmount Server

The new H13 Hyper series are enterprise-focused servers built with versatility and performance, optimized for supporting the highest TDPs and offering a flexible range of computing, networking, storage, and I/O expansion capabilities.



AS-1125HS-TNR



Front View



Rear View

## Key Features

- Dual socket 4th Gen AMD EPYC™ 9004 series processors
- 24 DIMM slots supporting DDR5-4800MHz
- NVMe SSD support with up to 12 drives in 1U
- Up to 3 PCIe 5.0 slots
- PCIe 5.0 AIOM slots supporting up to 400G networking
- Tool-less system for simplified maintenance

MODEL	AS-1125HS-TNR
CPU	• Dual 4th Gen AMD EPYC™ 9004 Series Processors
Memory	• 6T DDR5-4800 in 24 DIMMs
Storage	• 8x 2.5" hot-swap NVMe SSDs (Option for up to 12 drives)
Boot Drives	• 2x M.2 NVMe boot drive
Networking	• AIOM/OCP 3.0 network interface slot





# Gold Series High Performance Enterprise Supermicro 2U Hyper | SYS-221H-TNR

## Best-in-class Performance and Flexibility Rackmount Server

The new X13 Hyper series brings next-generation performance to Supermicro's range of rackmount servers, built to take on the most demanding workloads along with the storage & I/O flexibility that provide a custom fit for a wide range of application needs.



SYS-221H-TNR



Front View



Rear View

## Key Features

- Dual socket 4th Gen Intel® Xeon® Scalable processors with support for Intel Xeon CPU Max Series
- Free-air and liquid cooling options for maximum performance and efficiency
- 32 DIMM slots supporting DDR5-4800MHz
- NVMe SSD support with up to 16 drives in 2U
- Up to 4 PCI-E 5.0 x16 slots in 2U
- Up to 2 AIOM slots for flexible networking options
- Tool-less system for simplified maintenance

MODEL	SYS-221H-TNR
CPU	• Dual 4th Gen Intel® Xeon® Scalable processors
Memory	• 1TB DDR5-4800 in 32 DIMMs
Storage	• 8x 2.5" hot-swap 3.84TB NVMe SSDs
Networking	• 2 Dual-port 100GbE NICs + 1 Dual-port 25GbE NIC



# Gold Series Cloud Services

## Supermicro BigTwin® 2U 4-Node | SYS-621BT-HNTR

### Compute-dense platform optimized for density and performance required by Cloud Services solution providers

The industry's unparalleled multi-node design strikes a balance between density and performance, enabling cloud services to optimize their use of space and resources. The Gold Series configuration is specially crafted to deliver high-density computing power, complemented by lightning-fast high-performance storage, making the most out of available space and resources.



SYS-621BT-HNTR

Liquid Cooled Node



Front View



Rear View

### Key Features

- Rear-loading hot-swappable nodes with rear I/O and front-loading hot-swappable storage
- 2U 4-Node design doubles compute and memory density compared to a standard 1U server
- Resource-saving architecture with shared power and cooling for optimal efficiency and lower TCO
- SAS3 support via Broadcom® 3808
- Redundant Titanium Level power supplies

CONFIGURATION	SYS-621BT-HNTR
CPU	• Dual 4th Gen Intel® Xeon® Scalable processors per node
Memory	• 512GB DDR5-4800 in 16 DIMMs per node
Storage	• 3x 3.5" hot-swap 3.8TB NVMe SSDs per node
Boot Drives	• 480GB M.2 NVMe SSD per node
Networking	• 1 Dual-port 10G SFP+ NIC per node



# Gold Series Content Delivery Network

## Supermicro BigTwin® 2U 2-Node | SYS-221BT-DNTR

**Thermally-optimized multi-node platform capable of supporting high-powered CPUs for intensive content delivery workloads**

The industry's leading multi-node architecture designed for superior performance and serviceability. This dual-node configuration is optimized to provide maximum compute power for content distribution at the cloud edge.



SYS-221BT-DNTR



Front View



Rear View

### Key Features

- Rear-loading hot-swappable nodes with rear I/O and front-loading hot-swappable storage
- 2U 2-Node design maximizes thermal capacity to accommodate the highest TDP processors
- Resource-saving architecture with shared power and cooling for optimal efficiency and lower TCO
- Redundant Titanium Level power supplies

### CONFIGURATION **SYS-221BT-DNTR**

CPU	• Dual 4th Gen Intel® Xeon® Scalable processors per node
Memory	• 256GB DDR5-4800 in 16 DIMMs per node
Storage	• 2x 2.5" hot-swap 1.92TB SATA SSDs per node
Boot Drives	• 240GB M.2 SATA SSD per node
Networking	• 1 Dual-port 100GbE NIC per node



# Gold Series Cloud Data Center

## Supermicro CloudDC SuperServer | SYS-621C-TN12R

### All-in-one Rackmount Platform for Cloud Data Centers with NVMe and GPU support

Ultimate flexibility on I/O and storage with up to 6 PCIe 5.0 slots and dual AIOM slots (PCIe 5.0; OCP 3.0 compliant) for maximum data throughput. Supermicro X13 CloudDC systems are designed for convenient serviceability with tool-less brackets, hot-swap drive trays and redundant power supplies that ensure a rapid deployment and more efficient maintenance in data centers. High-efficiency Titanium Level redundant power supplies provide resiliency and lower carbon footprint.



SYS-621C-TN12R



Front View



Rear View

### Key Features

- Dual socket 4th Gen Intel® Xeon® Scalable processors
- 16 DIMM slots supporting DDR5-4800MHz
- 3.5" drive bays with NVMe/SATA/SAS support
- Up to 6 PCIe 5.0 slots
- Dual AIOM slots for flexible networking options

CONFIGURATION	SYS-621C-TN12R
CPU	• Dual 4th Gen Intel® Xeon® Scalable processors
GPU	• 2x NVIDIA A100
Memory	• 1TB DDR5-4800 in 16 DIMMs
Storage	• 12 hot-swap NVMe SSDs
Boot Drives	• 2x 960GB M.2 SSD
Networking	• 2x Dual 200GbE NICs, or • 2x NVIDIA Quadro Sync • 1x Dual-port 100G OCP 3.0



# Gold Series Cloud Data Center

## Supermicro CloudDC | AS-2015CS-TNR

### All-in-one Rackmount Platform for Cloud Data Centers with NVMe and GPU support

Supermicro H13 CloudDC systems are single-socket servers optimized for I/O flexibility with many cloud-focused applications. Offering convenient serviceability with tool-less brackets, hot-swap drive trays, and redundant power supplies ensure rapid deployment and efficient maintenance in data centers.



AS-2015CS-TNR



Front View



Rear View

### Key Features

- Single socket 4th Gen AMD EPYC™ 9004 series processors
- 12 DIMM slots supporting DDR5-4800MHz
- 3.5" drive bays with NVMe support
- Up to 6 PCIe 5.0 slots
- Dual PCIe 5.0 AIOM slots supporting up to 400G networking

MODEL	AS-2015CS-TNR
CPU	• Single 4th Gen AMD EPYC™ 9004 Series Processors
Memory	• 3TB DDR5-4800 in 12 DIMMs
Storage	• 12x 2.5" hot-swap drive bays
Boot Drives	• 2x M.2 NVMe boot drive
Networking	• Dual AIOM with NCSI (OCP 3.0)



# Gold Series Social Media Hosting

## Supermicro CloudDC Superserver | SYS-121C-TN10R

### All-in-one Rackmount Platform for Cloud Data Centers with NVMe and GPU support

Ultimate flexibility on I/O and storage with up to 2 PCIe 5.0 slots and dual AIOM slots (PCIe 5.0; OCP 3.0 compliant) for maximum data throughput. Supermicro X13 CloudDC systems are designed for convenient serviceability with tool-less brackets, hot-swap drive trays and redundant power supplies that ensure a rapid deployment and more efficient maintenance in data centers. High-efficiency Titanium Level redundant power supplies provide resiliency and lower carbon footprint.



SYS-121C-TN10R



Front View



Rear View

### Key Features

- Compact 1U form factor
- Dual socket 4th Gen Intel® Xeon® Scalable processors
- 16 DIMM slots supporting DDR5-4800MHz
- 2.5" storage with up to 10 U.2 NVMe/SAS/SATA drives and all-hybrid options
- Up to 2 PCIe 5.0 x16 slots
- Dual AIOM slots for flexible networking options

### CONFIGURATION **SYS-121C-TN10R**

CPU	• Dual 4th Gen Intel Xeon Scalable Processors
Memory	• 512GB DDR5-4800 in 16 DIMMs
Storage	• 10x 2.5" hot-swap NVMe drives
Networking	• Dual 25GbE SFP28



# SYSTEM MANAGEMENT SOFTWARE

## Leverage Supermicro's Management Software Suite to Meet Your IT Infrastructure Challenges

With a comprehensive range of high-end software solutions, Supermicro gives IT administrators the tools to optimize the management of IT systems and increase the utilization of computing and storage infrastructure. Whether you are looking to manage individual systems, optimize server lifecycle processes, or streamline operations for an entire data center, Supermicro has the right software to help you accomplish your goals.



- Obtain valuable insights in your infrastructure
- Monitor the health of servers and critical components
- Get proactive alerts



- Maintain system uptime to meet SLAs
- Early symptom detection to prevent component failure
- Remote management and troubleshooting



- Protect your IT infrastructure from external threats
- Centralized patch and BIOS management
- Extensive security features

## System Management Software Suite Bundles

Supermicro's System Management Software Suite consists of a set of specialized applications. These are available in the following bundles.

Suite Bundle	Standard	Basic	Advanced	Enterprise
<b>Description</b>	Covers all core functionality to effectively set up, manage, and monitor your Supermicro systems. These features are available to all Supermicro users.	Extends the core functionality and makes system management easier with additional features, such as remote BIOS management and system updates.	Delivers a broad set of tools to help administrators improve the performance, up-time, and monitoring of Supermicro systems.	Offers an extensive platform to manage large data centers and coordinate automated lifecycle management, software-defined infrastructure, and more in a single pane of glass.
<b>License</b>	<ul style="list-style-type: none"> <li>• No license required</li> </ul>	<ul style="list-style-type: none"> <li>• SFT-OOB-LIC</li> </ul>	<ul style="list-style-type: none"> <li>• SFT-DCMS-SINGLE</li> </ul>	<ul style="list-style-type: none"> <li>• SFT-DCMS-SINGLE +</li> <li>• SFT-SDDC-SINGLE</li> </ul>
<b>Key Features*</b>	<ul style="list-style-type: none"> <li>• Secure remote console (KVM/HTML5)</li> <li>• System temperature monitoring</li> <li>• System power thresholds &amp; alerts</li> <li>• Component monitoring</li> <li>• Email alerting</li> <li>• Remote configuration</li> <li>• Offline diagnostics</li> <li>• Crash dump</li> <li>• License management</li> </ul>	<ul style="list-style-type: none"> <li>• Remote BMC management</li> <li>• Remote BIOS management</li> <li>• Out-of-Band systems checks</li> <li>• TPM Provisioning</li> <li>• Mount/Unmount ISO images from Samba/HTTP</li> <li>• Basic Redfish APIs</li> <li>• CIM management</li> <li>• SysLog</li> </ul>	<ul style="list-style-type: none"> <li>• Remote OS deployment</li> <li>• Auto-discovery</li> <li>• Power capping</li> <li>• RAID monitoring and configuration</li> <li>• HDD monitoring</li> <li>• Advanced Redfish APIs</li> <li>• FW update policy</li> <li>• System lock down</li> <li>• Crash screen/video capture</li> </ul>	<ul style="list-style-type: none"> <li>• 3rd Party vendor support</li> <li>• POD &amp; Rack-level management</li> <li>• SDI Lifecycle management</li> <li>• Manage Composable Dissagregated Infrastructure</li> <li>• Zero-touch provisioning for network configuration</li> <li>• Single pane of glass for data center deployment</li> <li>• Rich analytics &amp; telemetry</li> <li>• User defined role-based access control</li> </ul>

\* For detailed information, please check with your Supermicro sales representative or refer to Supermicro website: <https://www.supermicro.com/en/solutions/management-software>



# World Class Total IT Solutions

## Rack Plug and Play

*Rack Scale Solutions / Design /  
Production / Validation / Logistics and  
Service. The capacity of 3000 Integrated  
Rack Solutions per month, including up  
to 1000 Liquid Cooled Racks per month*

*Flexible AC Power  
(120/208/230/480VAC, Single/3-phase)  
48VDC Power*

*10/25/40/100/200/400/800 Gb/s  
Network Testing Environments*

*Air Cooling / Free Air Cooling /  
Liquid Cooling*

*Turnkey Data Center Solutions  
within two weeks*

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