



P9000AG7 (AC)







Reimagining Al Infrastructure for the Next Era of Compute

Highlights

- Equipped with dual AMD EPYC[™] 9005
 Series Processors
- Powered by the NVIDIA HGX™ B200 system with air cooling solution
- Best GPU Communication with NVIDIA
 NVLink™ Bridge
- Support DDR5 DIMM, 6400 MT/s @ 1DPC
- Support up to 12 U.2 NVMe SSD
- Inventec-designed switchboard provides maximum bandwidth for NVIDIA GPUDirect® RDMA
- Increase power efficiency and reliability
 by decoupling 12V and 54V power source
- Modular design for scalability and serviceability

The Inventec P9000AG7 (AC) is purpose-built to meet the rising demands of advanced AI and HPC workloads that require exceptional scalability, compute density, and energy efficiency. By integrating the latest AMD EPYC™ 9005 Series processors with the NVIDIA HGX™ B200 8-GPU system, it delivers a balanced architecture that combines powerful processing with seamless scalability across diverse deployment needs. This design enables enterprises to handle large-scale datasets efficiently, support complex model development, and drive accelerated computing with confidence. It offers a resilient and high-performance platform ready to tackle the challenges of AI training, scientific computing, and data-intensive operations.

Flexible Compute Engine for Evolving AI Workloads

The P9000AG7 (AC) features a powerful and flexible 10U air-cooled design, integrating dual AMD EPYC™ 9005 Series processors with the NVIDIA HGX™ B200 8-GPU platform, delivering the compute performance required for demanding Al training and inference workloads. It supports up to 12 U.2 NVMe SSDs, which are connected under the same switchboard as the GPUs to keep large datasets close to compute resources and accelerate data movement during intensive workload processing, enabling optimal NVIDIA GPUDirect® Storage (GDS) performance. An advanced air-cooling system maintains stable thermal performance even during sustained high-load GPU operations, empowering organizations to scale data-driven workloads with confidence.



Powering Seamless Data Movement for Next-Gen Al

The P9000AG7 (AC) keeps pace with the needs of evolving AI models by supporting high-speed DDR5 memory, delivering up to 6400 MT/s at 1DPC to ensure fast data access for computeintensive workloads. The NVIDIA NVLink™ Bridge connects GPUs for seamless inter-GPU communication, supporting parallel computing across demanding tasks. Additionally, the Inventec-designed switchboard is optimized to provide maximum bandwidth for NVIDIA GPUDirect® RDMA, enabling direct, highspeed data transfers between GPUs and other system components, which reduces latency and accelerates data movement throughout the system. This architecture ensures that the P9000AG7 (AC) can efficiently handle complex Al training, large-scale simulations, and dataheavy HPC applications with consistent performance.

Modular Design for Simplified Serviceability

Maintaining peak system performance requires thoughtful design. The P9000AG7 (AC) adopts a modular approach that simplifies serviceability with tool-less access to fans, power supplies, NIC, and storages. The clear separation between the CPU and GPU modules improves airflow management and thermal zoning, while also making upgrades and maintenance straightforward to reduce downtime in missioncritical Al environments.

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Form Factor	10U Rackmount W x H x D: 448x 441x 850 mm (17.63x 17.36x 33.46inch)
Processor	5th Gen AMD EPYC™ Processors up to 400W
GPU Module	NVIDIA HGX™ B200 (AC)
PCIe Slot (from MLB)	Option(1) 1x FHHLDW Option(2) 2x FHHLSW Option(3) 1x OCP 3.0 SFF + 1x FHHLSW
PCIe Slot (from Switch)	8x Low Profile card (PCleG5x16)
Storage (from Switch)	8x U.2 NVMe SSD bays
Storage (from MLB)	4x U.2 NVMe SSD bays from CPU (option) 2x M.2 NVMe SSD
Management Port	1x RJ45 for BMC(AST2600) remote management
Cooling	Air cooling
Power Supply	3300W 54V ATS PSU, support 4+2 redundancy 2400W 12V PSU, support 1+1 redundancy Support S5 power and thermal for DPU
Fan	15x 8086 Fan for GPU cooling 5x 8056 Fan for CPU cooling

About Inventec Data Center Solutions (Inventec EBG)

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Inventec Data Center Solutions (Inventec EBG) was established in 1998 and has been focusing on the design and manufacturing of server systems in Inventec Corporation. Over decades, Inventec EBG has been the key server system supplier of the global branding clients.

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