

# RS720-E9-RS8-G

GPU-optimized 2U scalable server for HPC, data visualization and rendering workloads



## FEATURE

- Powered by the Intel® Xeon® Scalable platform
- Two double-deck GPU support including NVIDIA Tesla or Quadro
- 205W CPU with 24 DIMM support
- Scalable design for growing workloads with eight 3.5-inch SATA/SAS/up to 4 NVMe HDDs, dual PCIe or SATA M.2
- Ultrafast connectivity with an OCP 2.0 Mezzanine card for HPC applications
- Exclusive thermal radar technology for energy efficiency

## No.1 Performance in Industry-standard SPEC Benchmarks

RS720-E9-RS8-G supports two of the latest Intel Xeon Scalable Family processors, featuring 205W CPUs with 56 cores and 112 threads for leading performance. It also has 24 memory slots that fit up to 7TB of DDR4 memory for intensive computing.

## Dual GPU Support for Graphics-intensive Applications

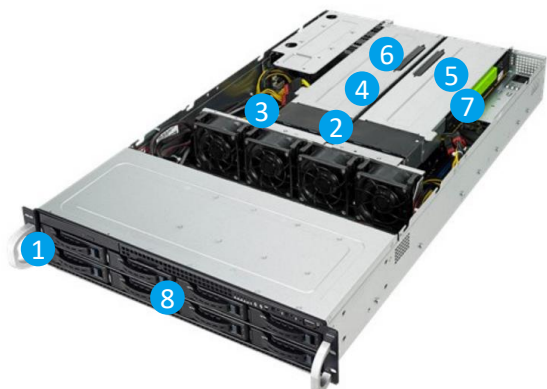
RS720-E9-RS8-G supports two double-deck GPU cards including NVIDIA Tesla and Quadro to deliver outstanding computing throughput and unparalleled performance, ideal for graphics-intensive applications. Delivering 10.87 TFLOPS of Double-Precision Performance with two NVIDIA Tesla V100 GPU, RS720-E9-RS8-G provides maximum performance for artificial intelligence and deep learning.

## Ultrafast Connectivity for HPC Applications

RS720-E9-RS8-G features two embedded 1 Gigabit Ethernet ports and supports up to 100 Gigabit interconnect speeds with the addition of PCIe adapter cards for ultrafast connectivity. Additionally, it supports one OCP 2.0 Mezzanine card (Gen3 x16 link) for HPC applications that require high-bandwidth, low-latency network support to connect multiple nodes and clusters.

## Exclusive Performance Boost technology

ASUS servers feature exclusive Performance Boost technology to achieve the best server performance and agility by tuning servers to match the requirements of workloads, letting you gain greater control of your server environment.



1. Asset Tag
2. 24 x DIMM, DDR4-2933/2666 RDIMM, LRDIMM, LRDIMM 3DS, DCPMM
3. Dual Intel® Xeon® Scalable Processor Family (205W)
4. Dual M.2 (NGFF), 22110/2280/2260/2242
5. Two double-deck GPU support including NVIDIA Tesla or Quadro
6. 1 x OCP 2.0 Mezzanine (Gen3 x16 link)
7. 1+1 Redundant 80 PLUS PSU
8. 8 x 3.5" or 2.5" Hot-swap HDD Bays (SATA/SAS/NVMe)

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## SPECIFICATION

<b>Processor Support</b>		2 x Socket P (LGA 3647) 1 <sup>st</sup> and 2 <sup>nd</sup> Generation Intel® Xeon® Scalable Processors Family (205W) UPI 10.4 GT/s
<b>Core Logic</b>		Intel® C621 PCH
<b>Memory</b>	<b>Total Slots</b>	24 (6-channel per CPU, 12 DIMM per CPU)
	<b>Capacity</b>	Maximum up to 7680GB
	<b>Memory Type</b>	DDR4 2933/2666/2400 RDIMM/LRDIMM/LRDIMM 3DS/ DCPMM* *Intel® Optane™ DC persistent memory (DCPMM)
	<b>Memory Size</b>	4GB,8GB, 12GB, 32GB (RDIMM) / 64GB,128GB(RDIMM 3DS) / 32GB, 64GB,128GB(LRDIMM) / 64GB,128GB ,256GB(LRDIMM 3DS) / 128GB, 256GB, 512GB (DCPMM) *Refer to Asus server AVL for latest update
<b>Expansion Slots</b>	<b>Total PCI/PCI-X/PCIe/PIKE Slots</b>	6+1
	<b>Slot Type</b>	2 x PCI-E x16 (Gen3 x16 link) FH,FL (for GPU*2) 1 x PCI-E x16 (Gen3 x16 link) LP,HL 3 x PCI-E x16 (Gen3 x8 link) FH,HL 1 x OCP 2.0 Mezzanine (Gen3 x16 link)
<b>Disk Controller</b>	<b>SATA Controller</b>	Intel® PCH 10 x SATA 6Gb/s ports + 1 x M.2 connector(SATA 6Gb/s & PCI-E Gen3 x4 link) or 9 x SATA 6Gb/s ports + 2 x M.2 connector(SATA 6Gb/s & PCI-E Gen3 x4 link) Intel® RSTe ( for Windows and Linux; Support software RAID 0, 1, 10 & 5)
	<b>SAS Controller</b>	Optional kits: ASUS PIKE II 3008 8-port SAS HBA card, ASUS PIKE II 3108 8-port SAS HW RAID card 12G SAS Support
<b>Storage Bays</b>		8 x 3.5" or 2.5" Hot-swap Storage Device Bays (4x SATA/SAS + 4x SATA/SAS/NVMe) 2 x M.2 (22110, 2280, 2260, 2242) (Support SATA/PCIe M.2,SATA RAID)
<b>Networking</b>	<b>LAN</b>	1 x Dual Port Intel I350-AM2 Gigabit LAN Controller, 1 x Management Port
<b>Graphic</b>	<b>VGA</b>	Aspeed AST2500 64MB
<b>Front I/O Ports</b>		2 x USB 2.0 ports, 1 x VGA port
<b>Rear I/O Ports</b>		2 x USB 3.0 ports 1 x VGA port 2 x RJ-45 GbE LAN ports 1 x RJ-45 Management LAN port
<b>Switch/LED</b>		Front Switch/LED: 1 x Power switch/LED, 1 x Location switch/LED, 1 x Reset switch, 1 x HDD Access LED, 1 x Message LED, LAN 1-4 LED * LAN3-4 for Mezzazine card use Rear Switch/LED: 1 x Power switch, 1 x Q-Code/Port 80 LED, 1 x Message LED, 1 x HDD LED, 1 x Location LED
<b>OS Support</b>		Please find the latest OS support from <a href="http://www.asus.com/">http://www.asus.com/</a>
<b>Security Option</b>		TPM 2.0
<b>Management Solution</b>	<b>Software</b>	ASUS Control Center
	<b>Out of Band Remote Management</b>	On-Board ASMB9-iKVM for KVM-over-IP
<b>Dimension</b>		750mm x 444mm x 88mm (29.52" x 17.48" x 3.46")
<b>Net Weight Kg (CPU, DRAM &amp; HDD not included)</b>		15.98 kg
<b>Gross Weight Kg (CPU, DRAM &amp; HDD not included, Packing include)</b>		23.25 kg
<b>Power Supply (following different configuration by region)</b>		1+1 Redundant 1300W/1200W 80 PLUS Platinum Power Supply Rating: 100-127Vac/200-240Vac,10A/5A ,50/60Hz, Class I (240Vdc Only for China)
<b>Environment</b>		Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 60°C Non operation humidity: 20% ~ 90% ( Non condensing)