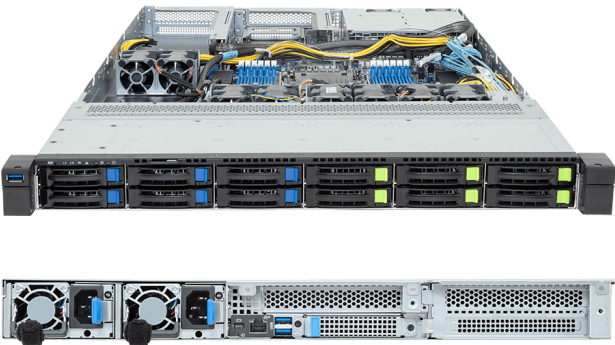


R164-AG2-AAJ1

Rack Server - Intel® Xeon® 6 - 1U UP 1 x PCIe Gen5 GPU



Key Features

- Supports 1 x Dual slot Gen5 GPU
- Single Intel® Xeon® 6900-Series Processors
- 12-Channel DDR5 RDIMM / MRDIMM, 12 x DIMMs
- 6 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 6 x 2.5" SATA/SAS-4 hot-swap bays
- 1 x M.2 slot with PCIe Gen5 x2 interface
- 1 x M.2 slot with PCIe Gen5 x2 interface, **shared with SATA**
- 1 x FHFL PCIe Gen5 x16 slot for GPUs
- 1 x FHFL PCIe Gen5 x16 slot
- 1 x FHHL PCIe Gen5 x16 slot
- 1 x OCP NIC 3.0 PCIe Gen5 x16 slot
- 1+1 2000W 80 PLUS Titanium redundant power supplies

Applications

AI Platform, AI Inference Server, Visual Computing, Networks Server, Servers for Hybrid/Private Cloud...

Specification

Dimensions	1U (W438 x H43.5 x D815 mm)	PCIe Expansion Slots	1 x FHFL PCIe Gen5 x16, for GPUs 1 x FHFL PCIe Gen5 x16 ^[1] 1 x FHHL PCIe Gen5 x16 1 x OCP NIC 3.0 PCIe Gen5 x16, Support NCSI
Motherboard	MAG4-GU0		^[1] Blocked when a Dual slot GPU is installed.
CPU	Intel® Xeon® 6 Processors - Intel® Xeon® 6900-Series Processors Single processor, TDP up to 500W	I/O Ports	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1, 1 x Mini-DP, 1 x MLAN
OS Compatibility	OS Support List	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Socket	1 x LGA 7529 (Socket BR)	TPM	1 x TPM header (SPI), Optional TPM2.0 kit: CTM012 1 x PRoT connector (only enabled on RoT SKU)
Chipset	System on Chip	Power Supply	1+1 2000W 80 PLUS Titanium redundant power supplies AC Input: 100-240V
Memory	12-Channel DDR5 RDIMM/MRDIMM, 12 x DIMMs [RDIMM] Up to 6400 MT/s [MRDIMM] Up to 8800 MT/s ^[1] ^[1] MRDIMMs are supported only on select Intel® Xeon® 6 processors with P-cores.	System Fans	8 x 40x40x56mm
LAN	1 x 10/100/1000 Mbps Management LAN	Operating Properties	Operating: 10°C to 30°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
Video	Integrated in ASPEED® AST2600 - 1 x Mini-DP	Packaging Content	1 x R164-AG2-AAJ1 1 x CPU heatsink 1 x Mini-DP to D-Sub cable 1 x GPU power cable (16-pin, 550mm) 1 x Carrier 1 x 2-Section Rail kit
Storage	Front hot-swap: 6 x 2.5" Gen5 NVMe/SATA/SAS-4 ^[1] 6 x 2.5" SATA/SAS-4 ^[1] Internal M.2: 1 x M.2 (2280/22110), PCIe Gen5 x2 1 x M.2 (2280/22110), PCIe Gen5 x2, shared with SATA ^[1] SAS card is required to support SAS drives.	Ordering Part Numbers	6NR164AG2DR000AAJ1*
RAID	Require RAID add-in cards Onboard VROC key header	Optional Parts	- 3-Section Rail kit (Supports CMA): 25HB2-A56121-K0R - Cable Management Arm: 25HB1-R18300-K0R



Learn more at: <https://www.gigabyte.com/Enterprise>
* All specifications are subject to change without notice. Please visit our website for the latest information.
* All trademarks and logos are the properties of their respective holders.
© 2026 Giga Computing Technology Co., Ltd. All rights reserved.
Last updated: Jan 26, 2026