



Hyper SuperServer ARS-212HE-FNR

Single-socket Arm AGI CPU server with 64, 128, or 136 cores and up to 3TB of memory for cloud and edge computing.

Key Applications

Edge Computing, AI Inference and Machine Learning, Cloud Computing, Hyperscale Cloud Applications, Content Delivery Network (CDN),

Key Features

- Single Arm AGI Neoverse V3 processor server with 64/128/136 cores and a base TDP of 300W;
- 12 DIMMs supporting up to 3TB DDR5-8800 in 1DPC;
- Flexible PCIe Gen 6 slots with support for two double-width GPU cards;
- Support for OCP 3.0 TSFF via AIOM slot;
- Flexible storage options of E1.S (9.5/15/25mm) or U.2 NVMe drives;
- Redundant 2000W or 3200W (Optional for GPU) power supplies;



Form Factor	2U Rackmount Enclosure: 436.88 x 88.9 x 574mm (17.2" x 3.5" x 22.6") Package: 598 x 247 x 938mm (23.5" x 9.7" x 36.9")
Processor	Single processor(s) Arm AGI CPU Neoverse V3 with 64/128/136 cores Up to 136C/136T; Up to 128MB Cache
GPU	Up to 2 double-width GPUs
System Memory	Slot Count: 12 DIMM slots Max Memory (1DPC): Up to 3TB 8800MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 4 bays • 4 front hot-swap E1.S NVMe drive bays Option A: Total 6 bays • 6 front hot-swap E1.S NVMe drive bays Option B: Total 6 bays • 6 rear hot-swap 2.5" NVMe drive bays M.2: 1 M.2 PCIe 4.0 x1 NVMe slot (M-key 2280/22110)
Expansion Slots	Default • 3 PCIe 6.0 x16 FHFL double-width slots • 1 PCIe 6.0 x8 FHFL slot • 1 PCIe 6.0 x16 AIOM slot (OCP 3.0 compatible) Option A • 4 PCIe 6.0 x16 FHFL slots • 1 PCIe 6.0 x16 AIOM slot (OCP 3.0 compatible) Option B • 1 PCIe 6.0 x16 FHFL slot • 4 PCIe 6.0 x8 FHFL slots • 1 PCIe 6.0 x16 AIOM slot (OCP 3.0 compatible)
On-Board Devices	Via AIOM
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.2 Gen1 ports (front) Video: 1 VGA port (Front)

(Front View – System)



System Cooling	Fans: Up to 6 Heavy duty counter-rotating 6cm Fan(s) Air Shroud: 1 Air Shroud
Power Supply	2x 2000W Redundant (1 + 1) Titanium (certification pending) Level (96%) power supplies
System BIOS	BIOS Type: AMI 1024MB SPI Flash
Management	SuperCloud Composer® (SCC); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory Fan: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors
Dimensions and Weight	Weight: Gross Weight: 47.4 lbs (21.5 kg) Net Weight: 34.4 lbs (15.6 kg) Available Color: Silver
Operating Environment	RoHS Compliant Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 90% (Non-Condensing) Non-operating Relative Humidity: 5% to 95% (Non-Condensing)
Motherboard	Super AR3SPD
Chassis	CSE-HE211