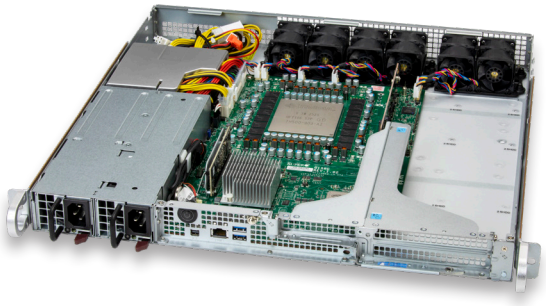
D-RAN Grace C1 System

Power-efficient Performance for the Distributed Network

As telecom operators modernize their radio access networks (RAN) to meet growing demands and unlock new AI-driven opportunities, the need for high-performance, energy-efficient edge systems is paramount. Supermicro's ARS-111L-FR is a short-depth, front I/O system, featuring an NVIDIA Grace™ C1 CPU, with options to plug in GPU cards for both RAN and AI use cases. It is purpose-built for compact, power-constrained edge environments, driving the next generation of vRAN and AI workloads.

The ARS-111L-FR offers versatile expansion capabilities to support a range of AI and RAN applications. It accommodates up to 2 low-profile GPUs such as the NVIDIA L4 for AI-RAN workloads or edge inferencing and a NVIDIA® ConnextX® NIC card for high-speed networking. With flexible I/O, storage, and acceleration options, this system provides operators a future-ready, high-performance platform at the intelligent edge.



System Specs	ARS-111L-FR
Processor Support	NVIDIA Grace™ CPU C1, up to 72 Arm® Neoverse V2 Cores
Memory Slots & Capacity	240GB LPDDR5X
AI Accelerator	Up to 2 low-profile GPU cards such as NVIDIA L4
Compliancy	Designed in compliance with NEBS level-3
I/O Ports	1 RJ45 1GbE dedicated BMC LAN port 2 USB 3.0 ports 1 MiniDP port 1 TPM header 1 20-pin NCSI header
Form Factor	1U Short-depth Rackmount 43x437x429 mm (1.7x12.7x16.9")
Expansion Slots	2 PCIe 5.0 x16 (FHFL) slots 1 PCIe 5.0 x16 (LP) slot 1 MCIO PCIe 5.0 x8 slots 1 M.2 Module for 2x NVMe M.2 slots
Drive Bays	2 Internal 2.5" drive bays (enabled via MCIO)
Cooling	6 40x56mm counter-rotating system fans
Operating Temperature	0°C~40°C (32°F~104°F) -5°C~55°C (23°F~131°F) (NEBS)
Power	Redundant 800W AC or 600W DC

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