

NVIDIA Vera Rubin RA4803-72N3



NVIDIA Vera Rubin NVL72, Fully Liquid Cooled Rack
Building the Next Frontier of AI



KEY FEATURES

- Up to 36 Vera CPUs and 72 Rubin GPUs in a rack-scale system
- Powered by NVIDIA NVLink™ 6 Switch, NVIDIA ConnectX®-9 SuperNIC, NVIDIA BlueField®-4 DPU
- Cable-less, fully liquid-cooled design for high efficiency
- Modular architecture with SOCAMM memory for easy serviceability

APPLICATIONS

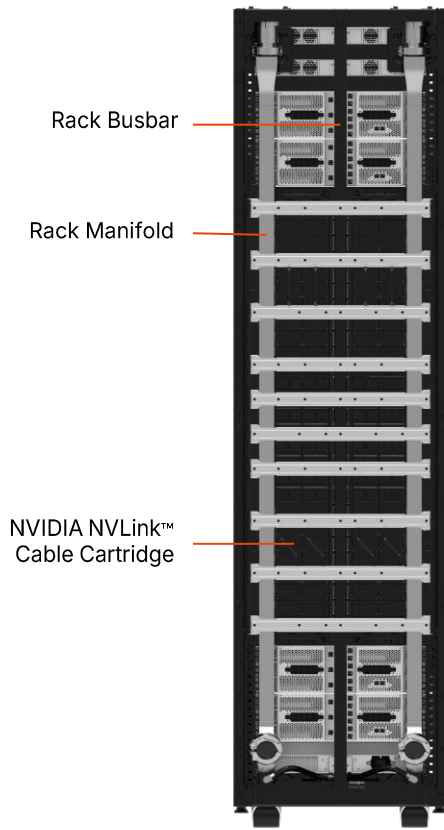
Agentic AI, large-scale AI reasoning, and AI factory-scale training and inference.

SPECIFICATIONS

RA4803-72N3 Rack		AS103-4N3 Compute Tray	
GPU	72 x NVIDIA Rubin GPUs	Form Factor	1U Liquid-cooled server node
CPU	36 x NVIDIA Vera CPUs (88 Olympus cores, Arm-compatible)	CPU & GPU	2 x NVIDIA Vera CPUs (88 Olympus cores, Arm-compatible) 4 x NVIDIA Rubin GPUs
Compute Tray	18 x NVIDIA Vera Ruben Compute Trays	GPU Memory	1,152GB HBM4 per tray (4 × 288GB)
Networking	72 x ConnectX®-9 SuperNIC™ bays, 18 x NVIDIA BlueField®-4 DPUs	CPU Memory	3TB LPDDR5X per tray (2 × 1.5TB)
NVLink Switch Tray	9 x NVIDIA NVLink™ 6 Switches Total NVLink™ Bandwidth – 260TB/s	Networking	4 x NVIDIA NVLink™ Gen 6 connectors (3.6TB/s) 4 x NVIDIA ConnectX®-9 SuperNIC™ bays (1.6Tb/s) 1 x NVIDIA BlueField®-4 B4280 DPU (dual ports 400GbE)
Management	2 x NVIDIA SN2201 management switches	Storage	4 x E1.S NVMe Internal: 1 x E1.S NVMe for OS boot
Power Shelf	4 × 3U 110kW (6 × 18.3kW PSUs and additional bulk capacitors) 2 × Power WHIPs per shelf Supports 415V / 480V input via IEC connector	Security Options	TPM 2.0
Max. TDP Support	Max Q = 188kW Max P = 228kW	Management	Aspeed® AST2600
Dimension (W x H x D)	48U NVIDIA MGX™ Rack: 600 × 2300 × 1200 mm 23.6 × 90.4 × 47.2 inch	Cooling System	Fully liquid-cooled
		Dimension (W x H x D)	1U MGX Chassis: 438 × 43.6 × 766 mm 17.2 × 1.7 × 30.2 inch

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

RA4803-72N3 PRODUCT OVERVIEW

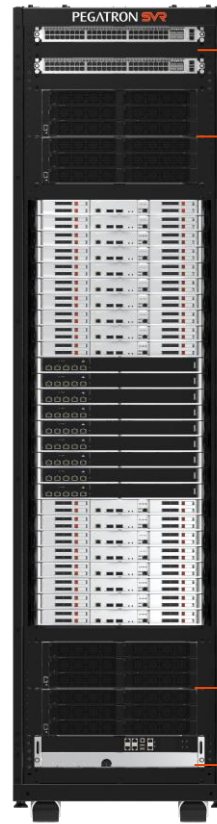


Rack Busbar

Rack Manifold

NVIDIA NVLink™ Cable Cartridge

▲ Rear View



2 x Management Switch

2 x 3U Power Shelves

10 x Compute Trays

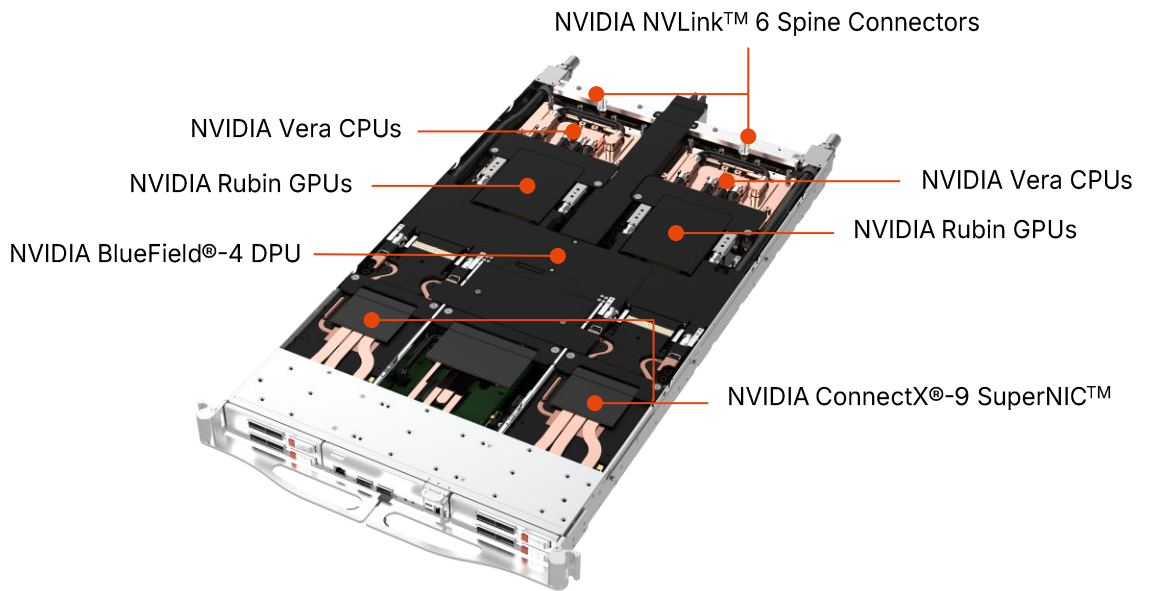
9 x NVLink™ Switch Trays

8 x Compute Trays

2 x 3U Power Shelves

Leak Detection System

▲ Front View



NVIDIA NVLink™ 6 Spine Connectors

NVIDIA Vera CPUs

NVIDIA Rubin GPUs

NVIDIA BlueField®-4 DPU

NVIDIA Vera CPUs

NVIDIA Rubin GPUs

NVIDIA ConnectX®-9 SuperNIC™

▲ AS103-4N3 Compute Tray Configuration