NEXT COMPUTING

NEXUS

FEATURING PROCESSORS BY

AMPERE

512 CORE PETABYTE CARRY-ON EDGE AI COMPUTER POWERED BY AMPERE

The Nexus with Ampere 512 core petabyte carry-on was designed to bring purpose-built computing solutions anywhere you need to be. Whether you need to do on-site cyber security assessment, or you want to accelerate your network capabilities with edge computing, the Nexus offers a rugged travel-ready package with the professional computing power you need.

This cutting-edge solution combines powerful and energy-efficient Ampere processors with a portable form factor that's unprecedented in systems offering this level of professional computing performance.

ROLLING CARRY-ON SYSTEMS BUILT-IN

Rugged Portable Case - Wheels and extendable handle make travel a breeze and dimensions match TSA guidelines for carry-on, meaning you don't have to let your systems out of your sight.

Configuration Flexibility - Let NextComputing build your system to suit your use case; 2x 2U systems, 4x 1U systems, or a mix of each, whatever your needs.

Ampere Processors - Up to 512 arm64 cores (4x 1U configuration) or 256 arm64 cores (2x 2U configuration)

High Data Throughput - Up to 8TB RAM in 4x 1U configurations, massive storage for high-volume data streaming, and dual 10GbE or 25GbE SPF28 LAN from each 1U or 2U system

Purpose-Built - NextComputing offers pre-set configurations, or we can work with you to configure your power, storage, and expansion options for your specific high-performance needs.

Available CPUs	Ampere Altra arm-based processors with 64, 96, or 128 cores per node.
Memory	Up to 8TB of system memory. Ask your NextComputing Sales Engineer for details.
PCI Expansion	Up to 7 full-length PCI Express x16 slots depending on processor configuration.
AI	Optional NVIDIA RTX 4000 SFF Ada , RTX 2000 Ada, and L4 Tensor Core GPU(s) for edge AI inference
Storage	• Up to 1PB NVMe storage per node in the 2x 2U node configuration • Up to 61TB NVMe removable SSD and up to another 16TB M.2 (2x 8TB) fixed drives per node in the 4x 1U node configuration
Network	• Each node has 2x 10GbE or 25GbE SPF28 Ethernet Ports and IPMI (Remote Management) • Options for multiple 4x1G, 4x10G SFP+ , 2x25G SF28, 2x40G QSFP28, 1x100G, 2x100G QSFP28 NIC cards
Security	Secure Boot UEFI compliant BIOS, Boot Guard, TPM 2.0
Remote Management	IPMI, HTML5 and API based out of band management with MAC addresses identification, one time boot on next reboot option, PXE boot option, Redfish compatible Out of Band (OBB) management connection
Operating Systems	• Support for Red Hat and Cent OS Enterprise Linux. Ampere is supported by a dozen Linux distributions. • Support for VMWare ESXi arm Fling hypervisor • Support for Windows Server, Windows 11
Power	• 2U nodes: 850W single 80 Plus Platinum PSU. Option for 1+1 hot swap redundant 600W 80 Plus Platinum PSU • 1U nodes: 600W 80 Plus Platinum PSU
Environmental	• 0°C–40°C / 32°F–104°F. Non-Operating: -20°C–70°C, -4°F–158°F. • Relative humidity (5-95%) non-condensing • FCC Class A, CE, TUV, ROHS, Conflict Minerals Free
Physical	TSA / IATA approved airline carry-on 22" x 14" x 9", 559mm x 356mm x 229mm, 45.6 liters
Warranty	1 year parts and labor. 2nd and 3rd year warranty options
Purpose-Built Solutions	• Private label branding is available • Preload your images and applications and drop-ship directly to your customers • Purpose built application integration and configuration control management services

22"

14"

9"

TSA carry-on compliant dimensions