

Bring a Real-Time AI 5G Base Station With You Anywhere You Need to Be

The NextServer AI 5G Fly-Away Kit (FAK) is a “Data Center in a Suitcase” designed for teams that require high-performance computing in the most remote environments on Earth. By integrating the high-density AmpereOne® 192-core processor with carrier-grade 5G software and Edge AI, we provide a universal platform that functions as a secure, portable “AI Cloud.”

Built for the Edge

Engineered for maximum performance-per-watt, the NextServer AI 5G is optimized for the Ubuntu 24.04 LTS ecosystem and Canonical Kubernetes, providing a stable, carrier-grade platform for mission-critical applications.

- **Processor:** AmpereOne® 192-core arm64-bit CPU for massive parallel processing.
- **Memory:** 8 channels of DDR5 memory for high-bandwidth data handling.
- **Storage:** Terabytes of high-speed NVMe storage to support data-intensive pipelines.
- **AI Acceleration:** Optional NVIDIA RTX 4000 SFF Ada for high-demand inference.
- **DeepSig:** Option for integration of DeepSig software stack for AI inference on Ampere CPU and/or NVIDIA GPU for Spectrum Intelligence: Leverages OmniSIG® for real-time RF situational awareness
- **Connectivity:** Built-in 5G radio unit (RU) with portable antenna and Starlink Mini backhaul support.
- **Form Factor:** TSA/IATA Compliant airline carry-on (22" x 14" x 9") for global mobility.
- **Easy Management:** AI applications are quickly deployed and managed by Kasm Workspaces



NEXTSERVER AI 5G

SPECS

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|---------------------------|---|
| 5G Radio and OCUDU | Integrated 5G radio unit (RU), portable cellular antenna. SRS LF OCUDU carrier grade 5G software stack. Optional Ampere AI stack APIs and use case specific development/integration services from NextComputing. |
| AI | DeepSig: Option for integration of DeepSig software stack for AI inference on Ampere CPU and/or NVIDIA GPU for Spectrum Intelligence: Leverages OmniSIG® for real-time RF situational awareness |
| CPU | <ul style="list-style-type: none"> • AmpereOne® 192 core, 2.6GHz arm64 processor • Option for (2) AmpereOne processors w/o NVIDIA GPU |
| Memory | Up to 2TB RAM |
| PCI Expansion | (7) PCI Express slots for ½ height PCI Express cards to ¾ length cards or 9" length |
| Storage | <ul style="list-style-type: none"> • Removable mid-plane based drive bays for up to (8) NVME 2.5" drives capacities up to 61.44TB per high endurance data processing and recording SSD (480TB) as JBOD or RAID 0/1/5/6 configurations • Optional single or dual (4) port NVME HBA cards for up to (8) removable U.2 NVMe SSDs (bootable) • Up to (2) fixed NVMe M.2 4.0 SSDs to 8TB each |
| Network | <ul style="list-style-type: none"> • Options for multiple 4x1G, 4x10G SFP+ , 2x25G SF28, 2x40G QSFP28, 1x100G, 2x100G QSFP28 NIC cards • Standard: (2) 10Gbps Ethernet Ports and IPMI (Remote Management) |
| Security | Secure Boot UEFI compliant BIOS, Boot Guard, TPM2.0 |
| 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 | <ul style="list-style-type: none"> • Ubuntu 24.04.3 and Canonical Kubernetes 1.35 • SUSE Linux 16, SUSE Rancher, and SUSE Virtualization (Harvester) |
| Power | <ul style="list-style-type: none"> • 1+1 hot swap redundant 600W 80 Plus Platinum PSU • or single 850W 80 Plus Platinum PSU |
| Environmental | <ul style="list-style-type: none"> • 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 | 9" H x 21.75" W x 13.875" D (system and case) |
| Warranty | 1 year parts and labor. 2nd and 3rd year warranty options |



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