

# Cisco N9164E-NS4-O Powered by NVIDIA Spectrum Silicon

**Q: What is the Cisco N9100 switch and why is it significant?**

**A:** The Cisco N9100 is a 2RU 64-port 800G OSFP high-performance AI networking switch, powered by NVIDIA Spectrum-X Ethernet switch silicon. It is purpose-built for Ethernet-based AI-scale deployments, delivering industry-leading bandwidth, low latency, and lossless Ethernet fabrics. The Cisco N9100 accelerates AI adoption and simplifies operations for enterprise, neocloud, neoclouds and sovereign clouds.

**Q: What sets the Cisco N9100 apart in the market?**

**A:** The Cisco N9100 is the only other switching platform besides the NVIDIA Spectrum-X Ethernet platforms to achieve NCP Reference Architecture (RA) compliance for NVIDIA Spectrum-X solution. It supports both Cisco NX-OS and SONiC operating systems, unified under Cisco Nexus Dashboard management. This provides unmatched flexibility and simplifies modernization of existing data centers as part of the NVIDIA Spectrum-X Ethernet switch system.

**Q: How does the Cisco N9100 optimize AI workload performance?**

**A:** As part of the NVIDIA Spectrum-X Ethernet switch system, the Cisco N9100 offers 51.2 Tbps switching capacity—supporting up to 128x400G or 64x800G ports—and adaptive routing for real-time network optimization. This ensures that AI workloads operate efficiently at scale, making the Cisco N9100 ideal for large AI clusters and highperformance backend networks.

**Q: What are the key benefits for Cisco customers?**

**A: Scalability:** Supports large-scale AI clusters with lossless Ethernet fabrics.

**Flexibility:** Cisco offers diverse silicon options, including Cisco Silicon One, Cloud Scale, and NVIDIA Spectrum-X Ethernet switch silicon, for tailored solutions.

**Operating System Choice:** Supports both integrated Cisco NX-OS and robust SONiC OS.

**Unified Operations:** Managed centrally through Cisco Nexus Dashboard for simplified operations.

**Security:** Protect your network with Live Protect on Cisco Nexus switches and NX-OS, ensuring security and reliability.

**Q: Who should consider the Cisco N9100 switch?**

**A: Neocloud Providers:** Needing to efficiently scale high-performance AI clusters.

**Sovereign Clouds:** Requiring strict data sovereignty and security compliance.

**NCP RA Compliance:** Cisco Cloud Reference Architecture (CRA) with NVIDIA Spectrum-X Ethernet switch silicon Cisco N9100 is NCP RA compliant for Cisco NX-OS or SONiC.

**Q: How does the Cisco N9100 integrate with existing Cisco solutions?**

**A:** The Cisco N9100 integrates seamlessly into the Cisco Nexus operational model, supporting both Cisco NX-OS and SONiC. It works alongside Cisco Silicon One and cloud scale-based switches, ensuring consistent

architecture and operations across diverse deployment scenarios. Centralized management through Cisco Nexus Dashboard ensures smooth integration into existing infrastructures.

**Q: What are the software license requirements for the Cisco N9100 switch?**

**A:** The Cisco N9100 switch will support the same three license tiers – Essentials, Advantage, and Premier that are supported on other Cisco Nexus 9000 Series switches.

**Q: When would the Cisco N9100 switch be orderable?**

**A:** The Cisco N9100 switch will be orderable in November 2025 and is expected to start shipping in April 2026.