

Cisco Catalyst C9500-40X-A

Advanced Enterprise Core & Aggregation Switch Datasheet

NETWORK ADVANTAGE

Product Overview

The Cisco Catalyst C9500-40X-A is an advanced enterprise-class 1RU core and aggregation switch equipped with the full **Network Advantage** license. Powered by the Cisco UADP 2.0 ASIC, it delivers 40 non-blocking 10G SFP+ ports along with full Layer 3 routing protocols (BGP, OSPF, ISIS), MPLS, BGP EVPN VXLAN, and advanced Cisco DNA capabilities for large-scale enterprise campus networks.

GENERAL SPECIFICATIONS

Parameter	Specification Details
Model Code	C9500-40X-A
Form Factor	1 Rack Unit (1RU) Rack-mountable
Port Density	40 x 1/10 Gigabit Ethernet SFP/SFP+ Ports
Uplink Support	Modular Network Modules (8x 10G, 2x 40G, or 2x 25G options)
Power Supply	Dual redundant, hot-swappable AC/DC (Default: 950W AC)
Fan Tray	Hot-swappable variable speed fans (Front-to-Back Airflow)
License Included	Cisco Network Advantage (Full L3 Features & Automation)

PERFORMANCE & SCALABILITY

Metric	Capacity / Value
Switching Capacity	Up to 960 Gbps
Forwarding Rate	Up to 714 Mpps (Million Packets Per Second)
Total MAC Addresses	64,000
IPv4 / IPv6 Routes	Up to 212,000 IPv4 / 106,000 IPv6 (Advanced Scale)
Multicast Routes	32,000
DRAM / Flash Memory	16 GB DRAM / 16 GB Flash
VLAN IDs	4,094

NETWORK ADVANTAGE EXCLUSIVE FEATURES

- Advanced Layer 3 Routing:** Full BGP, OSPF, IS-IS, EIGRP, Policy-Based Routing (PBR), and VRF-Lite.
- MPLS & Virtualization:** Complete MPLS L2/L3 VPN support for network segmentation and service provider edge deployment.

- **BGP EVPN VXLAN:** Software-Defined Access (SD-Access) overlay fabric capabilities for modern campus architectures.
- **Enhanced Network Analytics:** Encrypted Traffic Analytics (ETA), Flexible NetFlow (FNF), and Full Telemetry support.
- **Cisco StackWise Virtual:** High-availability dual-switch stack operational as a single logical switch.

PHYSICAL & ENVIRONMENTAL SPECIFICATIONS

Property	Value
Dimensions (H x W x D)	1.73 x 17.5 x 21.52 inches (4.4 x 44.5 x 54.7 cm)
Weight	11.8 kg (26.0 lbs)
Operating Temperature	0°C to 45°C (32°F to 113°F)
Operating Humidity	10% to 95% (non-condensing)
Input Voltage	100 to 240 VAC (50/60 Hz)