

Cisco Catalyst 9300 Series Network Module (C9300X-NM-8M=)

Cisco Catalyst 9300 Series Network Module - Expansion module - 100M/1G/2.5G/5G/10 Gigabit Ethernet x 8

Built for security, IoT, and Cloud. The Cisco Catalyst 9500 Series Switches are the next generation of enterprise-class core and aggregation layer switches, supporting full programmability and serviceability. Based on an x86 CPU, the Catalyst 9500 Series is Cisco's lead purpose-built fixed core and aggregation enterprise switching platform, built for security, IoT, and cloud. The switches include a 4-core, 2.4-GHz CPU, 16-GB DDR4 memory, and 16-GB internal storage. The Catalyst 9500 Series is the industry's first purpose-built 40 Gigabit Ethernet line of switches targeted for the enterprise campus. These switches deliver unmatched table scale (MAC/route/ACL) and buffering for enterprise applications. The Catalyst 9500 Series includes Small Form-factor Pluggable Plus (SFP+) switches with granular port densities that fit diverse campus needs. The switches support advanced routing and infrastructure services; software-defined access border capabilities; and network system virtualization with Cisco StackWise virtual technology that are critical for their placement in the campus core. The platform also supports all the foundational high-availability capabilities such as patching, Graceful Insertion and Removal (GIR), Cisco Nonstop Forwarding with Stateful Switchover (NSF/SSO), redundant platinum-rated power supplies, and fans.

Key Selling Points

Cisco Unified Access Data Plane (UADP) 2.0 Application-Specific Integrated Circuit (ASIC)
Switching capacity
Ethernet
AC power supplies
Routing entries
IPv6 support
NAT support
Open IOS-XE
Virtualization technology
SD-Access
Advanced security

Product Features

Cisco Unified Access Data Plane (UADP) 2.0 Application-Specific Integrated Circuit (ASIC)
Ready for next-generation technologies with programmable pipeline, microengine capabilities, and template-based, configurable allocation of Layer 2 and Layer 3 forwarding, Access Control Lists (ACLs), and QoS entries.

Switching capacity
Up to 960-Gbps switching capacity (IPv4) with up to 1440 Mpps of throughput.

Ethernet
Up to 24 nonblocking 40 Gigabit Ethernet QSFP ports.

AC power supplies
Platinum-rated AC power supplies.

Routing entries
Up to 64,000 routing entries for high-end campus access and aggregation deployments.

IPv6 support
IPv6 support in hardware, providing wire-rate forwarding for IPv6 networks.

NAT support
Support for both static and dynamic NAT and Port Address Translation (PAT).

Open IOS-XE
Open IOS-XE, a modern operating system for the enterprise with support for model-driven programmability, on-box Python scripting, streaming telemetry, container-based application hosting, and patching for critical bug fixes. The OS also has built-in defenses to protect against runtime attacks.

Virtualization technology
StackWise virtual technology, a network system virtualization technology that increases operational efficiency and boosts nonstop communications and scaled system bandwidth.

SD-Access
Policy-based automation from edge to cloud. Segmentation and micro-segmentation made easy, with predictable performance and scalability. Automation through the Cisco Application Policy Infrastructure Controller Enterprise Module (APIC-EM). Policy through the Cisco Identity Services Engine (ISE). Network assurance through the Network Data Platform. Faster launch of business services and significantly improved issue resolution time. Plug and Play (PnP) enabled: a simple, secure, unified, and integrated offering to ease branch or campus device rollouts or updates to an existing network.

Advanced security
Encrypted Traffic Analytics (ETA): you benefit from the power of machine learning to identify and take actions toward threats or anomalies in your network, including malware detection in encrypted traffic and distributed anomaly detection. Additionally, ETA is able to detect vulnerable implementations in encrypted traffic. Support for AES-256 with the powerful MACsec 256-bit encryption algorithm available on all models. Trustworthy systems: Secure Unique Device Identification (SUDI) support for Plug and Play, enabling tamper-proof device identity capability, which secures zero-touch provisioning by allowing your device to show a certificate to the server to be able to get onto your network.

Main specifications

Product Description	Cisco Catalyst 9300 Series Network Module - expansion module - 100M/1G/2.5G/5G/10 Gigabit Ethernet x 8
---------------------	--

Device Type	Expansion module
Form Factor	Plug-in module
Ports	100M/1G/2.5G/5G/10 Gigabit Ethernet x 8
Data Link Protocol	10GbE, 100Mb LAN, 1GbE, 2.5GbE, 5GbE
Data Transfer Rate	10 Gbps

Extended specification

General

Device Type	Expansion module
Form Factor	Plug-in module

Expansion / Connectivity

Interfaces	8 x 100M/1G/2.5/5/10 Gigabit Ethernet
------------	---------------------------------------

Networking

Ports	100M/1G/2.5G/5G/10 Gigabit Ethernet x 8
Connectivity Technology	Wired
Data Link Protocol	10 Gigabit Ethernet, Fast Ethernet, Gigabit Ethernet, 2.5 Gigabit Ethernet, 5 Gigabit Ethernet
Data Transfer Rate	10 Gbps

Product data is provided by CNET, we do not warrant the accuracy and completeness of the material contained in this data sheet