

Cisco Catalyst 9300X (C9300X-48HXN-A)

Cisco Catalyst 9300X - Network Advantage - switch - L3 - Managed - 8 x 100/1000/2.5G/5G/10GBase-T (UPOE+) + 40 x 100/1000/2.5G/5GBase-T (UPOE+) - rack-mountable - UPOE+

Cisco Catalyst 9300 Series switches are Cisco's lead stackable enterprise access switching platform and as part of the Catalyst 9000 family, are built to transform your network to handle a hybrid world where the workplace is anywhere, endpoints could be anything, and applications are hosted all over the place.



Key Selling Points

USB 2.0 slot to load system images and set configurations
Easy transition from 10G to 25G with dual-rate optics
Flexible downlink options with 1G Copper and Fiber as well as the densest Multigigabit links
Intelligent Power Management with Cisco StackPower technology, providing power stacking among members for power redundancy
Line-rate, hardware-based Flexible NetFlow (FNF), delivering flow collection of up to 128,000 flows
IPv6 support in hardware, providing wire-rate forwarding for IPv6 networks
Dual-stack support for IPv4/IPv6 and dynamic hardware forwarding table allocations for ease of IPv4-to-IPv6 migration
Support for both static and dynamic NAT and Port Address Translation (PAT)
IEEE 802.1ba AV Bridging (AVB) built in to provide a better audio and video experience through improved time synchronization and QoS
Precision Time Protocol (PTP; IEEE 1588v2) provides accurate clock synchronization with sub-microsecond accuracy making it suitable for distribution and synchronization of time and frequency over network

Product Features

BUILT-IN RESILIENCY
High-end fixed switching for Software-Defined Access, App hosting, high availability, assurance, and smart buildings

HIGH PERFORMANCE AND SCALABILITY
Support for high-density 10G and 40G uplinks with up to 480 Gbps of stacking bandwidth for robust performance and network expansion.

ADVANCED SECURITY
Features like Encrypted Traffic Analytics (ETA) and Cisco TrustSec provide comprehensive security, including Network Access Control (NAC) capabilities.

UP TO 1TB OF STACKING BANDWIDTH
With Stackwise-1T, Catalyst 9300 switches are the industry's highest-density stacking bandwidth solution with the most flexible uplink architecture.

CLOUD MANAGEMENT AND MONITORING
Cloud management and monitoring provides the ability to manage or view Catalyst 9300 switch statistics, configuration, and troubleshooting capabilities in Meraki dashboard.

Main specifications

Product Description	Cisco Catalyst 9300X - Network Advantage - switch - 48 ports - Managed - rack-mountable
Device Type	Switch - 48 ports - L3 - Managed - stackable
Enclosure Type	Rack-mountable
Subtype	10 Gigabit Ethernet
Ports	8 x 100/1000/2.5G/5G/10GBase-T (UPOE+) + 40 x 100/1000/2.5G/5GBase-T (UPOE+)
Power Over Ethernet (PoE)	UPOE+
Performance	Switching capacity: 2000 Gbps Switching capacity with stacking: 3000 Gbps Forwarding rate: 1488 Mpps Forwarding rate with stacking: 2232 Mpps
Capacity	IPv4 routing table entries: 39000 Multicast routes: 8000 QoS scale entries: 4000 ACL scale entries: 8000 IPv6 routing table entries: 19500 Packet buffer size: 16 MB FNF entries: 64000 VLAN IDs: 4094 Switched virtual interfaces (SVIs): 1000
MAC Address Table Size	32000 entries
Jumbo Frame Support	9198 bytes
Routing Protocol	MSTP, BGP, static IP routing, RIP-1, RIP-2, RIPv6, OSPF, EIGRP, BGP-4, IS-ISv4, OSPFv3, BGP for IPv6, PIM-SM, PIM-SSM, MPLS, GRE, RIP, policy-based routing (PBR), STP, VRRP, HSRP, MSDP, Bidirectional PIM, LISP, mVPN
Remote Management Protocol	NETCONF, RESTCONF, YANG, HTTP, CLI, gRPC, RMON 1, RMON 2, SNMP 1, SNMP 2c, SNMP 3

Features	Cisco UADP 2.0, QoS, PTP, MACsec support, SUDI, Cisco StackWise Technology, ZTP, Preboot Execution Environment, IPsec support, Cisco StackWise-1T technology, Rapid PVST+, FNF, NBAR 2, DSCP support, SRR, CIR, mDNS, EEE, Blue Beacon LED, EVPN, PIM, VPN support, VPLS, EoMPLS, CDP, FHS, 802.1x authentication, RSPAN, LACP support, full duplex mode, PVLAN support, CoPP, BSR Mechanism, VXLAN, TrustSec support, SGT caching, SPAN, NSF, GIR mode, AVB, CoAP support, VRF, LISP
Compliant Standards	IEEE 802.1BA, IEEE 1588v2, IEEE 802.1ae, IEEE 802.1s, IEEE 802.1w, IEEE 802.1p, IEEE 802.1x, IEEE 802.3ad (LACP), IEEE 802.3af, IEEE 802.3at, IEEE 802.3x, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3bz, IEEE 802.3an
Power	AC 115-240 V (50 - 60 Hz)
Power Redundancy	Optional
Dimensions (WxDxH)	44.5 cm x 52.4 cm x 4.4 cm
Weight	6.44 kg
Manufacturer Warranty	Limited lifetime warranty

Extended specification

General

Device Type	Switch - 48 ports - L3 - Managed - stackable
Enclosure Type	Rack-mountable
Subtype	10 Gigabit Ethernet
Ports	8 x 100/1000/2.5G/5G/10GBase-T (UPOE+) + 40 x 100/1000/2.5G/5GBase-T (UPOE+)
Power Over Ethernet (PoE)	UPOE+
Performance	Switching capacity: 2000 Gbps Switching capacity with stacking: 3000 Gbps Forwarding rate: 1488 Mpps Forwarding rate with stacking: 2232 Mpps
Capacity	IPv4 routing table entries: 39000 Multicast routes: 8000 QoS scale entries: 4000 ACL scale entries: 8000 IPv6 routing table entries: 19500 Packet buffer size: 16 MB FNF entries: 64000 VLAN IDs: 4094 Switched virtual interfaces (SVIs): 1000
MAC Address Table Size	32000 entries
Jumbo Frame Support	9198 bytes
Max Units In A Stack	8
Routing Protocol	MSTP, BGP, static IP routing, RIP-1, RIP-2, RIPng, OSPF, EIGRP, BGP-4, IS-ISv4, OSPFv3, BGP for IPv6, PIM-SM, PIM-SSM, MPLS, GRE, RIP, policy-based routing (PBR), STP, VRRP, HSRP, MSDP, Bidirectional PIM, LISP, mVPN
Remote Management Protocol	NETCONF, RESTCONF, YANG, HTTP, CLI, gRPC, RMON 1, RMON 2, SNMP 1, SNMP 2c, SNMP 3
Encryption Algorithm	256-bit AES, 128-bit AES
Features	Cisco UADP 2.0, QoS, PTP, MACsec support, SUDI, Cisco StackWise Technology, ZTP, Preboot Execution Environment, IPsec support, Cisco StackWise-1T technology, Rapid PVST+, FNF, NBAR 2, DSCP support, SRR, CIR, mDNS, EEE, Blue Beacon LED, EVPN, PIM, VPN support, VPLS, EoMPLS, CDP, FHS, 802.1x authentication, RSPAN, LACP support, full duplex mode, PVLAN support, CoPP, BSR Mechanism, VXLAN, TrustSec support, SGT caching, SPAN, NSF, GIR mode, AVB, CoAP support, VRF, LISP
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RAM	16 GB
Flash Memory	16 GB
Built-in Devices	RFID tag
Status Indicators	Status

Expansion / Connectivity

Interfaces	8 x 100/1000/2.5G/5G/10GBase-T RJ-45 UPOE+ - 90 W 40 x 100/1000/2.5G/5GBase-T RJ-45 UPOE+ - 90 W 1 x USB 2.0
Expansion Slots	1 (total) / 1 (free) x Expansion Slot

Manufacturer Warranty

Service & Support	Limited warranty - replacement - lifetime - response time: next business day Technical support - consulting - 90 days
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Miscellaneous

MTBF	188,200 hours
Compliant Standards	UL 60950-1, CAN/CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1, AS/NZS 60950-1, FCC CFR47 Part 15, EN 300 386 V1.6.1, EN 55032 Class A, CISPR 32 Class A, EN 61000-3-2, EN 61000-3-3, ICES-003 Class A, TCVN 7189 Class A, V-3 Class A, CISPR 35, EN 300 386, EN 55035, TCVN 7317, V-2/2015.04, V-3/2015.04, CNS 13438, KN32, KN35, RoHS

Power

Power Device	Internal power supply - hot-plug
Installed Qty	1
Max Supported Qty	2
Power Redundancy	Optional
Power Provided	1100 Watt
Voltage Required	AC 115-240 V (50 - 60 Hz)
80 PLUS Certification	80 PLUS Platinum

Environmental Parameters

Min Operating Temperature	-5 °C
Max Operating Temperature	45 °C
Humidity Range Operating	5 - 90% (non-condensing)
Min Storage Temperature	-40 °C
Max Storage Temperature	70 °C
Humidity Range Storage	5 - 90% (non-condensing)

Dimensions & Weight

Width	44.5 cm
Depth	52.4 cm
Height	4.4 cm
Weight	6.44 kg

What's in the box

- What's in the Box
- Switch with default primary power supply
- AC power cord
- rack-mount kit

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