

Cisco Catalyst 8300-2N2S-6T (C8300-2N2S-6T)

Cisco Catalyst 8300-2N2S-6T - Router 1GbE - rack-mountable - for P/N: C8300-DNA, UCS-E1100D-M6



Cisco Catalyst 8300 series Edge Platforms (Catalyst 8300) with Cisco IOS XE SD-WAN Software deliver Cisco's secure, cloud-scale SD-WAN solution for the branch. The Catalyst 8300 series is purpose-built for high performance and integrated SD-WAN Services along with flexibility to deliver security and networking services together from the cloud or on premises. It provides higher WAN port density and a redundant power supply capability. Catalyst 8300 series Edge Platforms also come with Trustworthy Solutions 2.0 infrastructure that secures the platforms against threats and vulnerabilities with integrity verification and remediation of threats. The Catalyst 8300 series Edge Platforms are well suited for medium-sized and offices for high WAN IPsec performance with integrated SD-WAN services.

Key Selling Points

Intel x86 CPU with 8-GB memory default

High-performance multicore processors support high-speed WAN connections

Dynamic core allocation architecture that can leverage data plane cores for I/O and service plane as per-user configuration

Increases scalability for IPsec throughput needs for medium- and large-sized branches

SSL and crypto hardware acceleration

Hardware-anchored Secure Boot and Secure Unique Device Identification (SUDI) support for Plug-and-Play to verify the identity of the hardware and software

Product Features

Robust security

Equipped with advanced encryption algorithms including 256-bit AES, Triple DES, and SHA-512, ensuring secure data protection and communication channels for all your network transactions.

High-capacity performance

Boasts impressive capacity with up to 1.9 Gbps SD-WAN IPsec throughput, 19.7 Gbps IPv4 forwarding throughput, and support for up to 1.6 million IPv4 routes, catering to high-demand network environments.

Comprehensive connectivity

Features a wide array of interfaces including Ethernet 1000Base-T for WAN/LAN, USB, and expansion slots for service modules, NIM, and PIM, providing versatile connectivity options for various network setups.

Advanced networking features

Supports a suite of sophisticated networking features such as Application Aware Routing (AAR), Quality of Service (QoS), and SD-WAN support, enhancing network efficiency and reliability.

Durable and reliable

Designed for longevity with a mean time between failures (MTBF) of 710,300 hours and compliance with multiple safety and environmental standards, ensuring dependable operation in diverse conditions.

Main specifications

Product Description	Cisco Catalyst 8300-2N2S-6T - router - rack-mountable
Device Type	Router
Enclosure Type	Rack-mountable - 2U
Data Link Protocol	Gigabit Ethernet
Performance	SD-WAN IPsec throughput (1400Bytes, clear text): up to 1.9 Gbps SD-WAN IPsec throughput (IMIX, clear text): 1.75 Gbps IPv4 forwarding throughput (1400-byte packet size): 19.7 Gbps IPsec throughput (1400Bytes, clear text): up to 1.9 Gbps
Capacity	SD-WAN overlay tunnels scale: 6000 IPsec SVTI tunnels: 4000 ACL: 4000 Access Control Entries (ACEs) per system (IPv4): 72000 IPv4 routes: 1600000 IPv6 routes: 1500000 Queues: 16000 NAT sessions: 1200000 Firewall sessions: 512000 Virtual Routing and Forwarding (VRF) entries: 4000
Network / Transport Protocol	IPSec, IPv4, IPv6, RSVP, DHCP, DNS, L2TPv3, PPPoE, RTP, RTCP, NTP
Routing Protocol	Static IP routing, RIP-1, RIP-2, OSPF, EIGRP, BGP, IS-IS, IGMPv3, PIM-SM, PIM-SSM, RSVP, LISP, HSRP, Bidirectional Forwarding Detection (BFD), GRE, policy-based routing (PBR), VRRP, MPLS, OSPFv3, DVMRP
Remote Management Protocol	DHCP, RADIUS, OMP, SNMP, NTP, SSH, SCP, NETCONF, CLI
VoIP Protocols	SIP, SRTP
Features	SD-WAN support, SUDI, QoS, firewall protection, NAT support, NBAR, FNF, Cisco UADP, ERSPAN, Cisco IPSLA, EEM, ACL support, EVC, AAA, AVC, PPP, MLPPP, MLFR, HDLC, CBWFQ, WRED, PIR, CAC, IVR, SAF, AAR, DNS client, DHCP client, PAT support, DHCP server, Syslog support, IPFIX, NTP server, FEC
Compliant Standards	IEEE 802.1ag, IEEE 802.3ah, IEEE 802.1Q

Dimensions (WxDxH)	43.8 cm x 47 cm x 8.89 cm
Weight	18.1 kg
System Requirements	Cisco IOS XE 17.3.2
Designed For	P/N: C8300-DNA, UCS-E1100D-M6

Extended specification

General

Device Type	Router
Enclosure Type	Rack-mountable - 2U
Connectivity Technology	Wired
Data Link Protocol	Gigabit Ethernet
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Network / Transport Protocol	IPSec, IPv4, IPv6, RSVP, DHCP, DNS, L2TPv3, PPPoE, RTP, RTCP, NTP
Routing Protocol	Static IP routing, RIP-1, RIP-2, OSPF, EIGRP, BGP, IS-IS, IGMPv3, PIM-SM, PIM-SSM, RSVP, LISP, HSRP, Bidirectional Forwarding Detection (BFD), GRE, policy-based routing (PBR), VRRP, MPLS, OSPFv3, DVMRP
Remote Management Protocol	DHCP, RADIUS, OMP, SNMP, NTP, SSH, SCP, NETCONF, CLI
Encryption Algorithm	SSL, IKE, DES, 128-bit AES, 256-bit AES, Triple DES, 1024-bit RSA, 2048-bit RSA, 768-bit RSA, ECDSA 256-bit, ECDSA 384-bit, MD5, SHA, 256-bit SHA, 384-bit SHA, 512-bit SHA, DTLS, TLS, PKI, HMAC, ESP, SHA-1, SHA-2, 256-bit AES-CBC, 256-bit AES-GCM
Authentication Method	RADIUS, Secure Shell (SSH)
Features	SD-WAN support, SUDI, QoS, firewall protection, NAT support, NBAR, FNF, Cisco UADP, ERSPAN, Cisco IPSLA, EEM, ACL support, EVC, AAA, AVC, PPP, MLPPP, MLFR, HDLC, CBWFQ, WRED, PIR, CAC, IVR, SAF, AAR, DNS client, DHCP client, PAT support, DHCP server, Syslog support, IPFIX, NTP server, FEC
Compliant Standards	IEEE 802.1ag, IEEE 802.3ah, IEEE 802.1Q, UL 60950-1, CAN/CSA C22.2 No. 60950-1, EN 60950-1, IEC 60950-1, AS/NZS 60950-1, IEC/EN 60825, FDA, AS/NZS CISPR 32 Class A, CISPR 32 Class A, CNS 13438 Class A, EN 300 386, EN 55032, EN 55032 Class A, EN 55035, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN55024, FCC CFR47 Part 15 B Class A, ICES-003 Class A, IEC 61000-3-2, IEC 61000-3-3, IEC/EN 61000-4-11, IEC/EN 61000-4-2, IEC/EN 61000-4-3, IEC/EN 61000-4-4, IEC/EN 61000-4-5, IEC/EN 61000-4-6, IEC/EN 61000-4-8, KN32 Class A, KN35
Processor	Intel
RAM	8 GB (installed) / 32 GB (max)
Flash Memory	8 GB
Hard Drive	16 GB

Expansion / Connectivity

Interfaces	WAN / LAN: 6 x 1000Base-T ¦ USB: 1 x
Expansion Slots	2 (total) / 2 (free) x service module (SM) ¦ 2 (total) / 2 (free) x NIM ¦ 1 (total) / 1 (free) x Pluggable Interface Module (PIM)
Installed Modules Qty (Max)	0 (installed) / 5 (max)

Miscellaneous

MTBF	710,300 hours
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Power

Power Device	Internal power supply
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Software / System Requirements

OS Required	Cisco IOS XE 17.3.2
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Environmental Parameters

Min Operating Temperature	0 °C
Max Operating Temperature	40 °C
Humidity Range Operating	5 - 85% (non-condensing)

Dimensions & Weight

Width	43.8 cm
Depth	47 cm
Height	8.89 cm
Weight	18.1 kg

IP Telephony

VoIP Protocols	SIP, SRTP
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Compatibility Information

Designed For	P/N: C8300-DNA, UCS-E1100D-M6
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