



The bridge to possible

[Data sheet](#)
Cisco public

Cisco Catalyst 8200 Series Edge Platforms

Contents

| | |
|--|----|
| Product overview | 4 |
| Platform details | 5 |
| Platform performance | 5 |
| Overall platform benefits | 6 |
| Supported modules | 8 |
| Memory, storage, and accessory options | 10 |
| Optics and transceivers modules | 10 |
| Power supplies | 10 |
| Software requirements | 11 |
| Licensing | 13 |
| Specifications | 13 |
| Services | 15 |
| Cisco Capital | 16 |
| Ordering information | 16 |
| For more information | 16 |

The Cisco Catalyst 8200 Series Edge Platforms are 5G-ready, cloud edge platforms designed for SASE, multi-layer security and cloud-native agility to accelerate your journey to cloud.



Cisco® Catalyst® 8200 Series Edge Platforms (Catalyst 8200) with Cisco IOS® XE SD-WAN Software deliver Cisco's secure, cloud-scale SD-WAN solution for the small branch. The Catalyst 8200 Series is purpose-built for performance and integrated SD-WAN Services along with flexibility to deliver security and networking services together from the cloud or on premises. The Catalyst 8200 Series Edge Platforms have a wide variety of interface options to choose from with backward compatibility to existing WAN, LAN and voice modules. Powered by Cisco IOS XE, fully programmable software architecture, and API support, these platforms can facilitate automation at scale to achieve zero-touch IT capability while migrating workloads to the cloud. Catalyst 8200 Series Edge Platforms also come with Trustworthy Solutions 2.0 infrastructure that secures the platforms against threats and vulnerabilities by an advanced integrity verification and remediation of threats.

The Catalyst 8200 Series Edge Platforms are well suited for small and medium-sized enterprise branch offices at optimal price/performance with integrated SD-WAN services.

Cisco® Catalyst® 8200 Series Edge Platforms are offered in two varieties; C8200L-1N-4T for the small branch with SASE compliant, cloud based security requirements, and C8200-1N-4T for the small to medium branch with requirements for higher throughput, scale and service flexibility. In addition to supporting SASE compliant cloud based security services, C8200-1N-4T also delivers a flexible system of best-of-breed, on-prem, security services through container-based apps, using Cisco's third-party ecosystem.

Product overview

Product highlights

Table 1. Product highlights

| Product feature | Benefits and description |
|---|---|
| Multicore processors | <ul style="list-style-type: none">• C8200-1N-4T uses an Intel x86 CPU with 8GB memory default• C8200L-1N-4T uses an Intel x86 CPU with 4GB memory default• High-performance multicore processors support high-speed WAN connections.• Dynamic core allocation architecture will repurpose unused cores into forwarding entities as per-user configuration. |
| Embedded IPsec VPN hardware acceleration | <ul style="list-style-type: none">• C8200-1N-4T with up to 1Gbps IPsec traffic• C8200L-1N-4T with up to 500Mbps IPsec traffic• Increases scalability for IPsec throughput requirements• SSL and crypto hardware acceleration |
| Integrated Gigabit Ethernet ports | <ul style="list-style-type: none">• Provides four built-in Ethernet WAN ports• Platform features two Ethernet ports in Small Form-Factor Pluggable (SFP) and two RJ45 ports, enabling for fiber as well as copper connectivity. |
| DRAM | <ul style="list-style-type: none">• C8200-1N-4T is shipped with 8GB DRAM• C8200L-1N-4T is shipped with 4GB DRAM.• Both platforms can be upgraded to 16G and 32G for higher scale and performance. |
| Flash memory support | <ul style="list-style-type: none">• Catalyst 8200 platforms have an integrated on-board 8G flash and it is not upgradeable. M.2 storage provides flash upgrade options. |
| M.2 storage | <ul style="list-style-type: none">• Both the Catalyst 8200 models ships with default 16G M.2 USB for SD-WAN logging and additional storage on the platform. It can be upgraded to 32G M.2 USB and 600G M.2 Non-Volatile Memory Express (NVMe) |
| Power supply | <ul style="list-style-type: none">• Catalyst 8200 platforms use an internal, fixed, AC power supply• Power over Ethernet (PoE) PSU option is available• PoE ports added in the Network Interface Module (NIM) slot will require an additional, external, PoE Power supply. |
| Modularity and form factor | <ul style="list-style-type: none">• 1RU form factor• Supports NIM, and Pluggable Interface Module (PIM) slots |
| Integrated security | <ul style="list-style-type: none">• Hardware-anchored Secure Boot and Secure Unique Device Identification (SUDI) support for Plug and Play to verify the identity of the hardware and software |

Platform details

Models and configurations

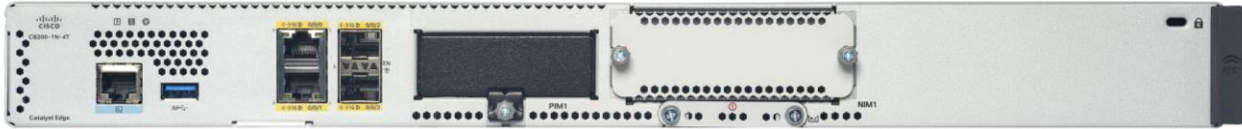


Figure 1.
C8200 platform series with 1 NIM slot and 4 x 1-Gigabit Ethernet WAN ports

Tables 2 and 3 detail platform specifications and performance, respectively.

Table 2. Cisco Catalyst 8200 Series specifications

| Model | Description | 1G port density | Slots | Memory (DRAM) default | Storage (M.2 SSD) default |
|---------------------|---|-----------------|----------------|-----------------------|---------------------------|
| C8200-1N-4T | C8200 1RU w/ 1 NIM slot and 4 x 1-Gigabit Ethernet WAN ports | 4 | 1 NIM 1 PIM | 8 GB | 16 GB |
| C8200L-1N-4T | C8200L 1RU w/ 1 NIM slot and 4 x 1-Gigabit Ethernet WAN ports | 4 | 1 NIM 1 PIM | 4 GB | 16 GB |

Platform performance

Table 3a Cisco controller mode (SD-WAN) performance specifications

| Feature | C8200-1N-4T | C8200L-1N-4T |
|--|-------------|---------------|
| SD-WAN IPsec Throughput (1400Bytes, clear text) | Up to 1Gbps | Up to 500Mbps |
| SD-WAN IPsec Throughput (IMIX*, clear text**) | 0.9 Gbps | 400Mbps |
| SD-WAN Overlay Tunnels scale | 2500 | 1500 |

* IMIX is average packet size of 352 Bytes packet size

**Based on clear text traffic measurement from traffic generator

Table 3b Cisco autonomous mode (non SD-WAN) performance specifications

| Feature | C8200-1N-4T | C8200L-1N-4T |
|--|---------------|---------------|
| IPv4 Forwarding Throughput (1400Bytes) | Up to 3.8Gbps | Up to 3.8Gbps |
| IPsec Throughput (1400Bytes, clear text**) | Up to 1Gbps | Up to 500Mbps |
| Number of IPsec SVTI Tunnels | 2500 | 1500 |

**Based on clear text traffic measurement from traffic generator

Table 3c Cisco autonomous mode (non SD-WAN) system scalability

| Feature | C8200-1N-4T | C8200L-1N-4T |
|--------------------------------|---------------------------------------|---------------------------------------|
| Number of ACLs per system | 4000 | 4000 |
| Number of IPv4 ACEs per system | 72K | 72K |
| Number of IPv4 Routes | 1.6M w/ default 8GB, up to 4M w/ 32GB | 800k w/ default 4GB, up to 4M w/ 32GB |
| Number of IPv6 Routes | 1.5M w/ default 8GB, up to 4M w/ 32GB | 800k w/ default 4GB, up to 4M w/ 32GB |
| Number of Queues | 16K | 16K |
| Number of NAT Sessions | 1.2M w/ default 8GB, up to 2M w/ 32GB | 600k w/ default 8GB, up to 2M w/ 32GB |
| Number of Firewall Sessions | 512K | 512K |
| Number of VRFs | 4000 | 2000 |

Overall platform benefits

Accelerated services with Cisco Software-Defined WAN

Cisco SD-WAN is a set of intelligent software services that allow you to connect users, devices, and branch office locations reliably and securely across a diverse set of WAN transport links. Cisco Catalyst 8000 Series Edge Platforms can dynamically route traffic across the “best” link based on up-to-the-minute application and network conditions for great application experiences. By Cisco SD-WAN you get tight control over application performance, bandwidth usage, data privacy, and availability of your WAN links. This control is critical as branches conduct greater volumes of mission-critical business using both on-premises and cloud controllers.

Application performance optimization

Ensure that SD-WAN networks meet Service-Level Agreements (SLAs) and maintain strong performance, even if network problems occur. With branch multi-cloud access, you can accelerate your SaaS applications with a simple template push from the SD-WAN controller. Features like Transmission Control Protocol (TCP) optimization, forward error correction, and packet duplication enhance application performance for a better user experience.

Multi-layer security

You can now move your traditional and complex WAN networks into an agile, software-defined, WAN with integrated security. The Cisco Catalyst 8200 Series Edge platforms connect branch offices to the Internet and cloud with industry-leading protection against major web attacks. Secure Direct Internet Access (DIA) from the branches help optimize branch workloads for improved performance, specifically for cloud-hosted applications. At the same time, Secure DIA ensures your branch is protected from external threats.

Unified communications:

The Cisco Catalyst 8200 Edge platforms offer rich voice services in both SD-WAN and traditional IOS-XE software feature stacks. Cisco is the only SDWAN vendor to natively integrate analog/digital IP directly into single CPE reducing Capex and Opex costs. In SD-WAN mode, the Catalyst 8200 Series also prevent internal and external outages using SRST enabling Branch router to assume role of call control PBX for Telephony survivability. They also continue to support the long list of traditional IOS-XE voice use cases like Cisco Unified Border Element (CUBE), Cisco Unified Communications Manager, Session Border Controller, SRST, ISDN and Voice over IP.

Cloud-native agility with a programmable software architecture

Cisco continues to offer a feature-rich traditional IOS-XE routing stack on the Cisco Catalyst 8200 Series Edge Platforms. IP Routing, IPSec, Quality of Service (QoS), firewall, Network Address Translation (NAT), Network-Based Application Recognition (NBAR), Flexible NetFlow (FNF), and many other features are part of Cisco IOS-XE, a fully programmable software architecture with API support and a wide variety of protocols and configurations. With an integrated software image and a single binary file, you can now choose between Cisco IOS XE SD-WAN and IOS XE. And easily move from one to the other when you choose to do so.

5G-ready

The Cisco Catalyst 8200 Series Edge Platforms are built for future 5G networks. With the higher throughputs from CAT18 LTE and 5G, wireless WAN solutions are becoming feasible options for primary transport use cases. These platforms will support both integrated pluggable modules as well as external cellular gateways with Cat18 LTE/5G capability for improved throughputs that address those use cases. Either integrated or external gateway can be chosen based on a specific branch's cellular coverage.

Interface flexibility

Switch/Routed ports

We continue to support 4 and 8-port layer 2 modules with PoE capability for a single box solution providing both switching and routing for a small Branch.

Voice modules

The Cisco Catalyst 8200 Series Edge Platforms will continue to support a variety of voice modules for the different voice needs at the branch. Voice module examples include Foreign Exchange Station (FXS), Foreign Exchange Office (FXO), Digital Signal Processor (DSP), etc.

Supported modules

Table 4. Modules supported on Cisco Catalyst 8200 Series Edge Platforms

| Product number | Description |
|------------------------|--|
| LAN modules | |
| NIM-ES2-4 | Cisco 4-port Gigabit Ethernet switch NIM |
| NIM-ES2-8 | Cisco 8-port Gigabit Ethernet switch NIM |
| NIM-ES2-8-P | Cisco 8-port Gigabit Ethernet switch NIM with PoE support |
| Voice modules | |
| NIM-2FXO | 2-port FXO NIM |
| NIM-4FXO | 4-port FXO NIM |
| NIM-2FXSP | 2-port FXS NIM |
| NIM-4FXSP | 4-port FXS NIM |
| NIM-2FXSP/4FXOP | 2-port FXS and 4-port FXO NIM |
| NIM-4E/M | 4-port E/M NIM |
| NIM-2BRI-NT/TE | 2-port BRI (NT and TE) NIM |
| NIM-4BRI-NT/TE | 4-port BRI (NT and TE) NIM |
| NIM-PVDM-32 | 32-channel Voice DSP NIM Module |
| NIM-PVDM-64 | 64-channel Voice DSP NIM Module |
| NIM-PVDM-128 | 128-channel Voice DSP NIM Module |
| NIM-PVDM-256 | 256-channel Voice DSP NIM Module |
| NIM-1MFT-T1/E1 | 1-port multiflex trunk voice/clear-channel data T1/E1 module |
| NIM-2MFT-T1/E1 | 2-port multiflex trunk voice/clear-channel data T1/E1 module |
| NIM-4MFT-T1/E1 | 4-port multiflex trunk voice/clear-channel data T1/E1 module |
| NIM-8MFT-T1/E1 | 8-port multiflex trunk voice/clear-channel data T1/E1 module |
| DSL/broadband | |
| NIM-VAB-A | Multi-mode VDSL2/ADSL/2/2+ NIM Annex A |
| NIM-VA-B | Multi-mode VDSL2/ADSL/2/2+ NIM Annex B |
| NIM-VAB-M | Multi-mode VDSL2/ADSL/2/2+ NIM Annex M |

| Product number | Description |
|---------------------------------------|--|
| NIM-4SHDSL-EA | Multi-mode G.SHDSL NIM |
| Channelized T1/E1 and ISDN PRI | |
| NIM-1CE1T1-PRI | 1-port Multiflex trunk voice/channelized data T1/E1 module |
| NIM-2CE1T1-PRI | 2-port Multiflex trunk voice/channelized data T1/E1 module |
| NIM-8CE1T1-PRI | 8-port Multiflex trunk voice/channelized data T1/E1 module |
| ISDN BRI WAN Interface | |
| NIM-2BRI-S/T | 2-port ISDN BRI WAN interface card for Data |
| NIM-4BRI-S/T | 4-port ISDN BRI WAN interface card for Data |
| Serial WAN interface | |
| NIM-1T | 1-port serial high-speed WAN interface card |
| NIM-2T | 2-port serial high-speed WAN interface card |
| NIM-4T | 4-port serial high-speed WAN interface card |
| Async WAN interface | |
| NIM-16A | 16-port Asynchronous Module |
| NIM-24A | 24-port Asynchronous Module |
| Wireless WAN (LTE) | |
| P-LTEAP18-GL | 4G/CAT18 LTE Advanced Pro Pluggable - Global |
| P-LTEA-EA | 4G/CAT6 LTE Advanced Pluggable for North American and Europe |
| P-LTEA-LA | 4G/ CAT6 LTE Advanced Pluggable for APAC, ANZ, and LATAM |
| NIM-LTEA-EA | LTE Advanced for Europe and North America |
| NIM-LTEA-LA | LTE Advanced for Asia Pacific, Australia and LATAM |

Memory, storage, and accessory options

Table 5. Cisco Catalyst 8200 Series memory, storage, and accessory options

| Product number | Description |
|------------------------|---|
| MEM-C8200-8GB | Cisco C8200 Edge Platform - 8 GB Memory |
| MEM-C8200-16GB | Cisco C8200 Edge Platform - 16GB Memory |
| MEM-C8200-32GB | Cisco C8200 Edge Platform - 32GB Memory |
| M2USB-16G | Cisco C8000 Edge Platform - 16G M.2 USB SSD Storage |
| M2USB-32G | Cisco C8000 Edge Platform - 32G M.2 USB SSD Storage |
| SSD-M2NVME-600G | Cisco C8000 Edge Platform - 600G M.2 NVMe SSD Storage |
| C8200-RM-19 | Cisco C8200 1RU Edge Platform - Rack Mount kit - 19" |
| C8200-RM-23 | Cisco C8200 1RU Edge Platform - Rack Mount kit - 23" |
| C8200-WM-1R | Cisco C8200 1RU Edge Platform - Wall Mount Kit |
| C8200-RFID-1R | Cisco C8200 1RU Edge Platform - RFID |
| C8200-NIM-BLANK | Cisco C8200 NIM Blank |
| C8200-PIM-BLANK | Cisco C8200 PIM Blank |

Optics and transceivers modules

Find a full list of optics and transceivers [here](#).

Power supplies

Table 6. Cisco Catalyst 8200 1RU edge platforms power supply specifications

| Power supply feature | Default | PWR-CC1-150WAC Optional external PSU for PoE |
|--|-----------------------------|--|
| Power maximum rating | 100W | 150W For PoE only PoE Budget: 150W |
| Input-voltage range and frequency | 90 to 264 VAC 47 - 63 Hz | 90 to 264 VAC 47 - 63 Hz |
| Power supply efficiency | 85% | Avg 89% |
| Input current | 1.5A Max | 2A Max |

| Power supply feature | Default | PWR-CC1-150WAC Optional external PSU for PoE |
|--------------------------------|-------------|--|
| Output ratings | 12V 8.4A | 54V 2.78A |
| Output holdup time | 20ms | 10ms |
| Power supply input receptacles | IEC 320 C14 | IEC 320 C14 |
| Power cord rating | 10A | 10A |

Asset Management: Catalyst 8200 Series Edge Platforms have an embedded RFID tag that holds Serial Number and Product ID for easy asset and inventory management using commercial RFID readers. The RFID tag is external and can be easily removed if needed or can be unselected at the time of ordering. It also features an extendable Label tag providing the same information. A QR code on this tag makes asset management easy by simply scanning label using a smart phone QR reader.

Software requirements

Cisco DNA Software for the Catalyst 8200 Series offers comprehensive solutions for enterprise branch networks.

Table 7. Catalyst 8200 Series minimum software requirements

| Platform Product ID (PID) | Description | Minimum software requirement |
|---------------------------|--|--------------------------------------|
| C8200-1N-4T | Cisco Catalyst 8200 Series Edge Platform | Cisco IOS XE Software Release 17.4.1 |
| C8200L-1N-4T | Cisco Catalyst 8200 Series Edge Platform | Cisco IOS XE Software Release 17.5.1 |

Table 8a. Software features and protocols for autonomous mode

| Feature | Description |
|---------------------------|--|
| Protocols | IPv4, IPv6, static routes, Routing Information Protocol Versions 1 and 2 (RIP and RIPv2), Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), Border Gateway Protocol (BGP), BGP Router Reflector, Intermediate System-to-Intermediate System (IS-IS), Multicast Internet Group Management Protocol Version 3 (IGMPv3), Protocol Independent Multicast Sparse Mode (PIM SM), PIM Source-Specific Multicast (SSM), Resource Reservation Protocol (RSVP), Cisco Discovery Protocol, Encapsulated Remote Switched Port Analyzer (ERSPAN), Cisco IOS IP Service-Level Agreements (IPSLA), Call Home, Cisco IOS Embedded Event Manager (EEM), Internet Key Exchange (IKE), Access Control Lists (ACL), Ethernet Virtual Connections (EVC), Dynamic Host Configuration Protocol (DHCP), Frame Relay, DNS, Locator ID Separation Protocol (LISP), Hot Standby Router Protocol (HSRP), RADIUS, Authentication, Authorization, and Accounting (AAA), Application Visibility and Control (AVC), Distance Vector Multicast Routing Protocol (DVMRP), IPv4-to-IPv6 Multicast, Multiprotocol Label Switching (MPLS), Layer 2 and Layer 3 VPN, IPsec, Layer 2 Tunneling Protocol Version 3 (L2TPv3), Bidirectional Forwarding Detection (BFD), IEEE 802.1ag, and IEEE 802.3ah |
| Encapsulations | Generic Routing Encapsulation (GRE), Ethernet, 802.1q VLAN, Point-to-Point Protocol (PPP), Multilink Point-to-Point Protocol (MLPPP), Frame Relay, Multilink Frame Relay (MLFR) (FR.15 and FR.16), High-Level Data Link Control (HDLC), Serial (RS-232, RS-449, X.21, V.35, and EIA-530), and PPP over Ethernet (PPPoE) |
| Traffic management | Quality of Service (QoS), Class-Based Weighted Fair Queuing (CBWFQ), Weighted Random Early Detection (WRED), Hierarchical QoS, Policy-Based Routing (PBR), |

| Feature | Description |
|---------------------------------|---|
| | Performance Routing (PfR), and Network-Based Application Recognition (NBAR) |
| Cryptographic algorithms | Encryption: DES, 3DES, AES-128 or AES-256 (in CBC and GCM modes) Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit) Integrity: MD5, SHA, SHA-256, SHA-384, SHA-512 |
| Unified Communication | Call Admission Control (CAC), Cisco Unified Border Element(CUBE), Cisco Unified Communications Manager (CUCM), Dialer, ISDN, Interactive Voice Response (IVR), RADIUS, RFC4040 based Clear Channel codec signaling with SIP, Resource Reservation Protocol (RSVP), RTP Control Protocol (RTCP), Service Advertisement Framework(SAF), Session Border Controller(SBC), Session Initiation Protocol for VoIP(SIP), Survivable Remote Site Telephony (SRST), Secure Real-time Transport Protocol(SRTP), Voice over Frame Relay (FRF.11), Voice Over IP and Voice modules |

Table 8b. Software features and protocols for controller mode

| Feature | Description |
|---------------------------------|---|
| Core Features | IPv4, IPv6, static routes, Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), Border Gateway Protocol (BGP), Overlay Management Protocol (OMP), Application Aware Routing (AAR), Traffic Engineering Service Insertion, zero-trust, whitelisting, tamper-proof module, DTLS/TLS, IPsec, classification, prioritization, low latency queuing, remarking, shaping, scheduling, policing, mirroring, Multicast IPv4 Support, Service advertisement and insert policy, SNMP, NTP, DNS client, Dynamic Host Configuration Protocol (DHCP), DHCP client, DHCP server, DHCP relay, syslog, SSH, SCP, Cisco FlowD v10 IPFIX export, IPv6 for transport-side, VRRP, MPLS, NAT (DIA, Service-side, overload/PAT, NAT64, etc), NAT pools, split DNS, Access Control Lists (ACL), Bidirectional Forwarding Detection (BFD) over SSH, CLI, NTP server support, BFD with service-side BGP, BGP community propagation to OMP, 6 SLAs for AAR, Trustsec/SDA (Inline SGT propagation), custom app with SD-AVC, multicast AAR, dynamic on-demand tunneling, OSPFv3, route policies, Multi-VRF support |
| Encapsulations | Generic Routing Encapsulation (GRE), Ethernet, 802.1Q VLAN |
| Application Experience | Quality of service (QoS), Forward Error Correction (FEC), COS Marking, Weighted Random Early Detection (WRED) Hierarchical QoS, Policy-Based Routing (PBR), Network-Based Application Recognition (NBAR), Software Defined Access Visibility and Control (SD-AVC), per tunnel QoS, Cloud onRamp for SaaS, Enhanced Office 365 traffic steering, Direct Access, Flexible Netflow (FnF) |
| Cryptographic Algorithms | Encryption: AES-256 (in CBC and GCM modes), Internet Key Exchange (IKE), Cisco PKI Authentication: AAA, RSA (2048 bit), ESP-256-CBC, HMAC-SHA1, ECDSA (256/384 bit) Integrity: SHA-1, SHA-2 |
| Security C8200-1N-4T | Built-in end-to-end segmentation (VPNs), ZBFW, PKI, Cisco DNA Layer Security, Snort IPS/IDS, URL Filtering, Advanced Protection(AMP), ThreatGrid(TG), ALG for ZBFW, SIG |
| Security C8200L-1N-4T | Built-in end-to-end segmentation (VPNs), ZBFW, PKI, Cisco DNA Layer Security, SIG |
| Unified Communication | Cube Connector, SRST, Voice Modules |

Licensing

Cisco Catalyst 8200 Series Edge Platform is offered only with a Cisco DNA Software subscription, Enterprise Agreement, and Managed Service Licensing Agreement (MSLA). For more details, refer to this licensing guide.

Cisco DNA stack:

- Cisco DNA Essentials
- Cisco DNA Advantage
- Cisco DNA Premier

Network stack:

- Network Essentials
- Network Advantage

Specifications

Table 9. Mechanical specifications

| Description | Specification |
|--|---|
| Part number | C8200-1N-4T |
| Dimensions (H x W x D) | 1.73 in. x 17.25 in. x 11.8 in. |
| Rack Units (RU) | 1RU |
| Chassis weight | 10 lbs |
| Input voltage | AC: 90 to 264 VAC |
| Operating temperature | 32 to 104° F (0 to 40° C) |
| Storage temperature | -40 to 150° F (-40 to 70° C) |
| Relative humidity operating and nonoperating noncondensing | Ambient (noncondensing) operating: 5 to 85% Ambient (noncondensing) nonoperating and storage: 5 to 95% |
| Altitude | 0 to 10,000 feet (0 to 3050 meters) |
| Mean Time Between Failures (MTBF) | 692,577 hours |

Table 10. Safety and compliance

| Description | Specification |
|------------------------------|--|
| Safety certifications | UL 60950-1 CAN/CSA-C22.2 No. 60950-1 EN 60950-1 IEC 60950-1 AS/NZS 60950-1 IEC/EN 60825 Laser Safety FDA: Code of Federal Regulations Laser Safety |
| EMC (Emissions) | 47 CFR Part 15 Class A ICES 003 Class A AS/NZS CISPR 32 Class A CISPR 32 Class A EN55032 Class A VCCI-CISPR 32 Class A CNS-13438 Class A KN32 Class A IEC/EN 61000-3-2: Power Line Harmonics IEC/EN 61000-3-3: Voltage Fluctuations and Flicker |
| EMC (Immunity) | IEC/EN-61000-4-2: Electrostatic Discharge Immunity IEC/EN-61000-4-3: Radiated Immunity IEC/EN-61000-4-4: Electrical Fast Transient Immunity IEC/EN-61000-4-5: Surge AC, DC, and Signal Ports IEC/EN-61000-4-6: Immunity to Conducted Disturbances IEC/EN-61000-4-8: Power Frequency Magnetic Field Immunity IEC/EN-61000-4-11: Voltage DIPS, Short Interruptions, and Voltage Variations KN35 |
| EMC (ETSI/EN) | EN300 386: Telecommunications Network Equipment (EMC) EN55032: Multimedia Equipment (Emissions) EN55024: Information Technology Equipment (Immunity) EN55035: Multimedia Equipment (Immunity) EN61000-6-1: Generic Immunity Standard |

Services

Cisco Customer Experience Support Services for Catalyst 8000 platforms and Cisco DNA Software for SD-WAN and Routing

This section discusses the Cisco Support Services available for Catalyst 8000 platforms and associated Cisco DNA Software for SD-WAN and Routing, as well as optional Support Service offers.

- **Catalyst 8000 platforms:** Cisco Solution Support is the default and recommended Cisco Support Service. However, Cisco Solution Support is not mandatory; it can be removed or replaced with another Cisco support service or partner service per the customer's preference.
- **Cisco DNA Software for SD-WAN and Routing:** Cisco Solution Support is the default Cisco support service. However, Cisco Solution Support is not mandatory; the customer may choose to use the Cisco Subscription Embedded Software Support included with the purchase of this software.

Note:

- When Solution Support is selected, it must be ordered on both the Catalyst 8000 platform and Cisco DNA Software for SD-WAN and Routing for complete customer entitlement to this premium support service.
- SD-WAN and Routing, with both Solution Support or Cisco Subscription Embedded Software Support, customers are entitled to maintenance releases and software updates for **Cisco DNA SD-WAN and Routing software only**. The support for the Catalyst 8000 platform's OS and network stack, along with OS updates, is covered by the support contract on the Catalyst 8000 platform.

Cisco Solution Support is a premium support purpose-built for today's multiproduct, multivendor network environments and provides:

- A primary point of contact centralizing support across a solution deployment
- Solution, product, and interoperability expertise
- No requirement for customers to isolate their issue to a product to open a case
- 30-minute service response objective for Severity 1 and 2 cases
- Prioritized case handling over product support cases
- Product support team coordination (Cisco and Solution Support Alliance Partners)
- Accountability for multiproduct, multivendor issue management from first call to resolution, no matter where the issue resides

Learn more about Cisco Solution Support at www.cisco.com/go/solutionsupport

Cisco Subscription Embedded Software Support includes:

- Access to support and troubleshooting via online tools and web case submission. Case severity or escalation guidelines are not applicable.
- Cisco Technical Assistance Center (TAC) access 24 hours per day, 7 days per week to assist by telephone, or web case submission and online tools with application software use and troubleshooting issues.
- Access to www.cisco.com, providing helpful technical and general information on Cisco products, as well as access to Cisco's online Software Center library.

Note: No additional products or fees are required to receive embedded support for Cisco DNA Software for SD-WAN and Routing. However, if using embedded support for this software, hardware support for the Catalyst 8000 platforms must be purchased separately, as Cisco Subscription Embedded Software Support does not cover hardware. In this case, Cisco Smart Net Total Care Service is recommended for Catalyst 8000 platforms.

Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. [Learn more.](#)

Ordering information

To place an order, visit the [Cisco Ordering Home Page](#). To download software, visit the [Cisco Software Center](#).

For more information

For more information about the Cisco Catalyst 8200 Series Edge Platforms, visit <https://www.cisco.com/go/C8200> or contact your local Cisco account representative.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at <https://www.cisco.com/go/offices>.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <https://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)