Cisco C9350 Series Smart Switches

Contents

Overview

Cisco C9350 Series Smart Switches deliver exceptional performance and robust security with flexible management options to meet the demands of modern enterprise networks.

Built on the new Cisco Silicon One™ ASICs, Cisco C9350 Series Smart Switches deliver up to 10 Gbps multigigabit Ethernet and 90W Power over Ethernet (PoE) ports, converged switching and routing, and continuous zero-trust security. They are Cisco Hypershield-ready for advanced threat mitigation, provide support for post-quantum cryptography (PQC) algorithms and encryption to guard against future attacks using quantum computers, and are hardware-ready to offer protection against day-zero attacks on software vulnerabilities using Cisco Live Protect.

More than just the next generation of enterprise-grade switches, Cisco C9350 Series Smart Switches simplify IT operations by unifying hardware, software, and support, regardless of how you choose to manage your network.

- **Unified hardware** - Common hardware designed to support any management mode
- **Unified licensing** - Common licensing that unlocks advanced features and capabilities across platforms
- **Unified support** - Consistent and reliable product support for both hardware and software included with the unified licenses

Series highlights

Cisco C9350 Series Smart Switches are the evolution of enterprise-class stackable fixed campus access-layer switches designed to deliver security, scale, and flexibility while connecting, powering, measuring, and managing the network from enterprise access edge through the core.

Key features and benefits

Unified experience	Our new hardware offers a unified experience including licensing and support, enabling seamless management across cloud, on-premises and hybrid deployment models.
Performance and scalability	1.6 Tbps stacking, up to 48 ports of simultaneous 90W PoE, Fast PoE, Perpetual PoE, 100G/50G/40G/25G/10G/1G uplinks, and redundant titanium/platinum-rated power supplies.
Advanced security and cryptography	High-scale hardware access control lists (ACL) and campus fabric-based segmentation with VXLAN and Cisco TrustSec (CTS), hardware-capable up to 100G IPsec[1], line-rate MACsec[1] AES-GCM-256 encryption, advanced threat mitigation with Cisco Hypershield[1], day-zero attack mitigation with Cisco Live Protect[1], and post-quantum cryptography (PQC) algorithms[1] against quantum-enabled attacks.
Application and endpoint visibility	High-scale hardware Flexible NetFlow (FNF) and Application Visibility and Control (AVC) with network-based application recognition (NBAR)[1], eXtended Detection and Response (XDR)[1], Switched Port Analyzer Network (SPAN)/encapsulated remote SPAN (ERSPAN) packet mirroring, and IP Device Tracking (IPDT)/switch-integrated security features (SISF) device tracking and device sensor.
Enhanced app hosting	Enhanced X86-based multicore CPUs and DDR5 memory with 2 x 10G app gig ports and local solid-state drive (SSD) storage for third-party docker container-based application hosting, including ThousandEyes and Cisco Spaces.

[1] Software capability will be available in a future release.

Cisco IOS XE

Cisco IOS XE is a modern operating system for the enterprise with support for model-driven programmability, including NETCONF, RESTCONF, YANG, 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.

Cisco IOS XE supports operational flexibility in how users decide to manage their devices. By providing out-of-the-box support for on-premises, native, and hybrid cloud management capabilities on Cisco C9350 Series Smart Switches, IOS XE delivers a unified software operating system for multiple management modes.

Cisco IOS XE key features and benefits

Simplified campus automation	Simplified campus automation is designed to optimize the discovery and configuration of devices in your network with a more streamlined, simple, and easy-to-use automation tool. With features such as simplified discovery, IT can discover devices within the network within just a few steps. Also available is a GUI that provides a better, simplified view of switch configurations and software details on a port-by-port basis.
Automated device provisioning	Automated device provisioning is the ability to automate the process of upgrading software images and installing configuration files on Cisco C9000 Smart Switches and Cisco Catalyst 9000 Series Storage Switches when they are being deployed in the network for the first time. Cisco provides streamlined solutions such as plug-and-play and preboot execution environment (PXE) that support a simplified and automated deployment.
API-driven configuration	API-driven configuration is available with modern network switches such as Cisco C9350 Series Smart Switches. It supports a wide range of automation features and provides robust open APIs over NETCONF and RESTCONF using YANG data models for external tools, both off the shelf and custom built, to automatically provision network resources.
Granular visibility	Granular visibility enables model-driven telemetry to stream data from a switch to a destination. The data to be streamed is identified through subscription to a data set in a YANG model. The subscribed data set is streamed to the destination at specified intervals. Additionally, Cisco IOS XE enables the push model. It provides near-real-time monitoring of the network, leading to quick detection and rectification of failures.
Seamless software upgrades and patching	Seamless xFSU (Extended Fast Software Upgrade) software upgrades and SMU patching supports OS resilience. On Cisco C9350 Series Smart Switches, Cisco IOS XE supports hot patching without reboot, which provides fixes for critical bugs and security vulnerabilities between regular maintenance releases. This support lets you add patches without having to wait for the next maintenance release.
Trustworthy solutions built with Cisco Trust Anchor Technologies	Trustworthy solutions built with Cisco Trust Anchor module (TAm) technologies provide a highly secure foundation for Cisco products. With Cisco C9350 Series Smart Switches, these technologies enable hardware and software authenticity assurance for supply-chain trust and strong mitigation against man-in-the-middle attacks that compromise software and firmware. Trust Anchor capabilities include image signing, Secure Boot, and Cisco Trust Anchor module.

Models and specifications

A fully assembled Cisco C9350 Series switch includes the fixed chassis, an optional modular uplink network module, three modular fan units, at least one field-replaceable power supply, and associated accessories.

Figure 1. Front view of the Cisco C9350 Series Smart Switches

Table 1.   Cisco C9350 front-panel components

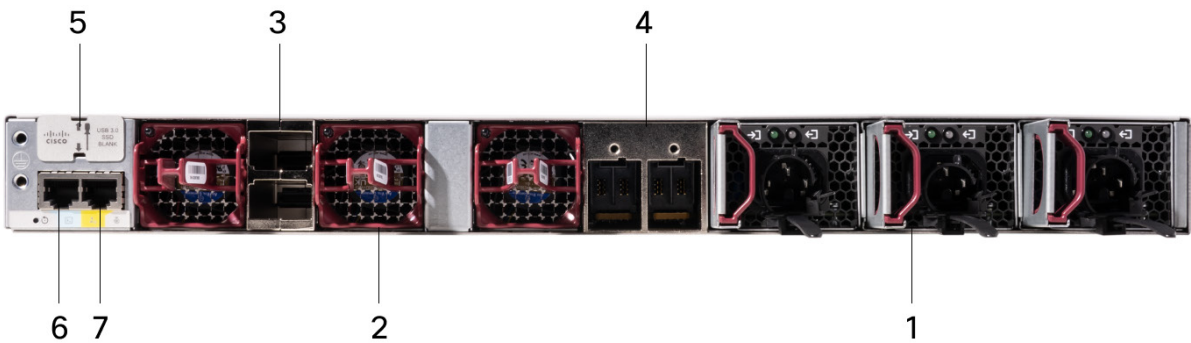| Label	Description
1	System air intake
2	Mode button
3	USB Type C console port
4	USB Type C host port
5	Downlink fixed ports
6	Uplink network module slot

Figure 2. Rear view of the Cisco C9350 Series Smart Switch

Table 2.   Cisco C9350 rear-panel components

Label	Description
1	Power supply modules
2	Fan modules
3	StackWise 1.6T port connectors
4	StackPower connectors
5	USB 3.0 SSD slot
6	CONSOLE (RJ-45 console)
7	MGMT (RJ-45 10/100/1000 management port)

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Chassis

Cisco C9350 Series Smart Switches are high-performance fixed access platforms designed for enterprise campus and branch environments. They offer high-density gigabit and multigigabit copper downlinks with advanced PoE support, along with modular uplinks for flexible high-speed Ethernet connectivity. Powered by the Silicon One™ A100/L ASIC, the Cisco C9350 delivers 1.3 Tbps throughput and 1.5 Bpps packet processing, supporting up to 256K IPv4 routes, 64K MAC addresses, and 128K HCAM entries for scalable ACLs and NetFlow. Its flexible pipelines, adaptable tables, and scalable buffering make it ideal for future-ready access deployments.

To learn more about Cisco Silicon One ASICs® on Cisco C9000 Series Smart Switches, please refer to the **Cisco Silicon One product family white paper**.

The platform also supports up to 1.6 Tbps stack bandwidth available across eight switches when stacked together and features three field-replaceable power supplies for enhanced power resiliency, redundant fans, and front-to-back airflow. Built-in security features like secure boot, image signing, and runtime integrity ensure a robust and secure foundation for modern enterprise networks.

Table 3.   Chassis features

Feature	Cisco C9350 chassis
Maximum chassis bandwidth	1.3 Tbps
Number of power supply bays	3
Minimum number of power supplies	1
Power supplies supported	3
Number of fan-tray bays	3

Table 4. Chassis specifications

Description		Specifications	
SKU/PID		C9350-24T C9350-48T C9350-24P C9350-48P C9350-24U C9350-48U	C9350-48TX C9350-48HX
Dimensions (H x W x D)	**Chassis only**	4.4 x 44.5 x 38.3 cm 1.73 x 17.5 x 15.1 in	4.4 x 44.5 x 47.2 cm 1.73 x 17.5 x 18.6 in
	With default power supply	4.4 x 44.5 x 42 cm 1.73 x 17.5 x 16.5 in	4.4 x 44.5 x51 cm 1.73 x 17.5 x 20 in
	With 1600W power supply	4.4 x 44.5 x 50.1 cm 1.73 x 17.5 x 19.7 in	4.4 x 44.5 x 51 cm 1.73 x 17.5 x 20 in
Weight with default power supply		C9350-24T = 13.8 lb (6.26 kg) C9350-48T = 13.8 lb (6.26kg) C9350-24P = 13.54 lb (6.14 kg) C9350-48P = 13.54 lb (6.14 kg) C9350-24U = 13.94 lb (6.35 kg) C9350-48U = 14.14 lb (6.42 kg)	C9350-48TX = 17.7 lb (8 kg) C9350-48HX = 18.73 lb (8.5 kg)
Input voltage		AC: 100V to 230V DC: –36V to –72 VDC	

Description	Specifications	
Operating temperature	–5° to 45° C (23° to 113° F) up to 6000 ft (about 1.83 km) –5° to 40° C (23° to 104° F) up to 10,000 ft (about 3.05 km)	
Storage temperature	–40° to 75° C (40° to 167° F)	
Relative humidity, operating and non-operating, non-condensing	10% to 95%, non-condensing	
Mean time between failures (MTBF) (hours)	C9350-24T: 346560 C9350-48T: 357320 C9350-24P: 342720 C9350-48P: 391980 C9350-24U: 313860 C9350-48U: 271720	C9350-48TX: 261150 C9350-48HX: 277660
BTU		

Fan units

Cisco C9350 Series Smart Switches are equipped with three field-replaceable fan modules designed with N+1 redundancy to maintain cooling even if one fan fails. The enhanced airflow design improves thermal efficiency, supporting stable operation across a wide range of deployment conditions. All fan modules are rear-accessible for easy, non-disruptive servicing.

Figure 3. Cisco C9350 series field-replaceable fan unit

Table 5. Fan modules

Model	Description
C9350-FAN-I=	Cisco C9350 Port Inlet Fan Module, SPARE

Power supplies

Cisco C9350 Series Smart Switches support up to three hot-swappable, field-replaceable power supplies, enabling N+1 redundancy for high availability. One power supply is included by default in bay 1, with options to add a second or third for increased PoE budget or redundancy. When multiple power supplies are present, the system automatically balances the load across active units to improve efficiency and thermal performance. In PoE deployments, this allows for higher power delivery across more ports while maintaining fault tolerance.

Figure 4. Cisco C9350 series 500W, 850W, and 1600W AC power supplies

Table 6. Power supply specifications for Cisco C9350 Series switches

Description	Specifications		
	PWR-C2-500WAC	PWR-C2-850WAC	PWR-C2-1600WAC
Power supply rated maximum output power	500W	850W	1600W (230V input) 1200W (115V input)
Total output BTU (note: 1000 BTU/hr = 293W)	1706	2900	5461 (1600W) 4096 (1200W)
Input-voltage range and frequency	90V to 264V 47 Hz to 63 Hz	90V to 264V 47 Hz to 63 Hz	180V to 264V (1600W) 103.5V to 132V (1200W)

Description	Specifications		
	PWR-C2-500WAC	PWR-C2-850WAC	PWR-C2-1600WAC
Power supply efficiency	92%	92%	94%
Input current	6A max	10A max	12.5A max
Output rating	8.93A max	15.18A max	28.57A max 21.43A max
Output holdup time Power-supply input receptacles	>20ms	>20ms	>20ms (1600W) >12ms (1200W)
Power-supply input receptacles	AC IEC 60320 C16	AC IEC 60320 C16	AC IEC 60320 C16
Physical specifications (H x W x D) cm	5.55 x 4 x 22 cm 2.18 x 1.57 x 8.66 in	5.55 x 4 x 22 cm 2.18 x 1.57 x 8.66 in	5.55 x 4 x 30 cm 2.18 x 1.57 x 11.81 in
MTBF	1900412		1126158

The Cisco C9350 series power supply units (PSUs) support two modes of operation.

Combined mode

The default Cisco C9350 chassis power supply mode is Combined. In Combined mode, the total power available for the entire chassis is equal to the sum of the output of all the power supplies, multiplied by the share ratio. In Combined mode, the power supplies can be of different wattage.

· P = Power output of one PSU

· N = Number of PSU (1, 2, or 3)

· Total combined power = P + (N–1) * P * (share ratio)

Table 7 lists the different power supplies available in these switches and available PoE power.

Table 7. Power supply options and PoE capabilities for Cisco C9350 Series Smart Switches

SKU	Primary power supply	Default or upgrade	Available PoE	Secondary PSU			Tertiary PSU Second PSU (500W/850W/1600W)		
				500W	850W	1600W	500W	850W	1600W
C9350-24T	PWR-C2-500WAC	Default	No PoE	-	-	-	-	-	-
C9350-48T	PWR-C2-500WAC	Default	No PoE	-	-	-	-	-	-
C9350-24P	PWR-C2-850WAC	Default	590W	720*W	720*W	720*W	720*W	720*W	720*W
	PWR-C2-1600WAC	Upgrade	720*W	720*W	720*W	720*W	720*W	720*W	720*W
C9350-48P	PWR-C2-850WAC	Default	590W	1090W	1440W	1440*W	1440*W	1440*W	1440*W
	PWR-C2-1600WAC	Upgrade	1340W	1440*W	1440*W	1440*W	1440*W	1440*W	1440*W

SKU	Primary power supply	Default or upgrade	Available PoE	Secondary PSU			Tertiary PSU Second PSU (500W/850W/1600W)		
				500W	850W	1600W	500W	850W	1600W
C9350-24U	PWR-C2-850WAC	Default	570W	1070W	1420W	1440*W	1440*W	1440*W	1440*W
	PWR-C2-1600WAC	Upgrade	1320W	1440*W	1440*W	1440*W	1440*W	1440*W	1440*W
C9350-48U	PWR-C2-850WAC	Default	570W	1070W	1420W	2170W	1570/ 1920/ 2880*W	1920/ 2270/ 2880*W	2670/ 2880*/ 2880* W
	PWR-C2-1600WAC	Upgrade	1320W	1820W	2170W	2880*W	2320/ 2670/ 2880*W	2320/ 2880*/ 2880*W	2320/ 2880*/ 2880*W
C9350-48HX	PWR-C2-1600WAC	Default	1120W	1620W	1870W	2720W	2120/ 2470/ 3220W	2470/ 2820/ 3570W	3220/ 3570/ 4320W
C9350-48TX	PWR-C2-500WAC	Default	No PoE	-	-	-	-	-	-

[1] Limited by port number and port rating (e.g., 24 PoE+ 30W ports = 720W)

[2] Limited by port number and port rating (e.g., 48 PoE+ 30W ports = 1440W)

[3] Limited by port number and port rating (e.g., 24 PoE+ 60W ports = 1440W)

Redundant N+1 mode

The Cisco C9350 chassis also supports N+1 redundancy mode, with N independent input circuits and safeguards against the failure of one (+1) of the circuits during a PSU failure. In Redundant mode, the power supplies can be of different wattage.

- N = number of PSU are active (1 or 2)

- +1 is the PSU reserved for redundancy

Power consumption

Power consumption depends on the unique per-device hardware configuration—specifically, the supervisor engine and line cards installed and the power supplies. To model the power consumption for a specific hardware configuration, visit the **Cisco Power Calculator**.

Copper Cisco C9350 models

Multigigabit models

The Cisco C9350 series multigigabit platforms are high-performance access switches designed for modern enterprise and smart building deployments. Supporting up to 48 ports of 1/2.5/5/10 Gbps with full 90W UPOE+ on every port, the switches power Wi-Fi 6/6E/7, IoT, and high-power devices at scale. Built on new Cisco Silicon One A100/L ASICs with an x86-based CPU control plane, they offer advanced programmability, telemetry, and application hosting. StackWise-1.6T allows up to eight switches to operate as one, scaling to 448 multigigabit and 384 UPOE+ ports—making them ideal for dense, high-throughput access environments.
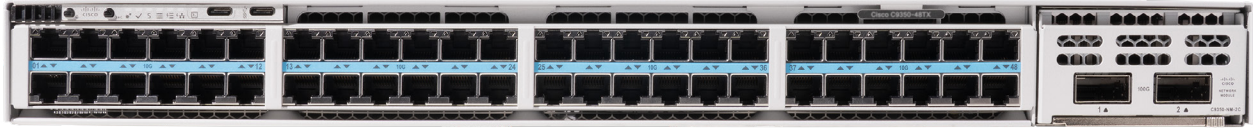
Cisco C9350-48HX
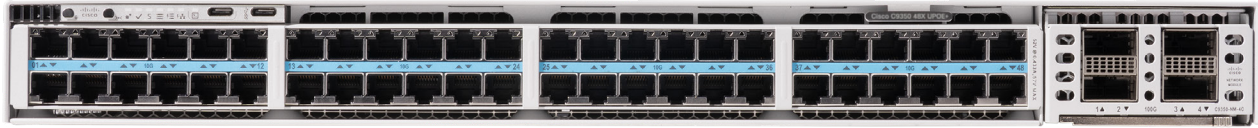
C9350-48HX use cases:

- Cisco C9350-48HX is optimized for enterprise access layer deployments requiring high-throughput multigigabit Ethernet and scalable power delivery.

- Designed for dense access environments with multigigabit interfaces supporting Wi-Fi 6/6E/7 and up to 90W UPOE+ per port for powering smart building systems, IP surveillance, and IT/OT endpoints.

C9350-48HX highlights:

- Cisco C9350-48HX is powered by dual Silicon One A100/L ASICs, delivering 1.3 Tbps of throughput per ASIC for superior performance and future-ready infrastructure.

- Cisco C9350-48HX provides 90W on all ports through UPOE+ (IEEE 802.3bt Type 4), with a total PoE budget of 4320W.

- Cisco C9350-48HX supports 10 Mbps to 10 Gbps (10M/100M/1G/2.5G/5G/10G) downlinks; 10 Mbps is full-duplex only.

- Cisco C9350-48HX features scalable StackWise-1.6 T technology, enabling up to 1.6 Tbps of stack bandwidth and supporting as many as 448 multigigabit and 384 UPOE+ ports in an eight-switch stack.

- Cisco C9350-48HX supports up to 400G bandwidth for modular uplinks (C9350-NM-4C, C9350-NM-2C, C9350-NM-8Y), ensuring ample throughput for bandwidth-intensive enterprise applications.

Cisco C9350-48TX

C9350-48TX use cases:

- Cisco C9350-48TX is purpose-built for enterprise access layer deployments requiring reliable, non-PoE multigigabit connectivity.

- The Cisco C9350 series delivers high-throughput Ethernet and seamless stacking—ideal for high-density, data-only access and network segmentation.

C9350-48TX highlights:

- Cisco C9350-48TX is powered by dual Silicon One A100/L ASICs, delivering 1.3 Tbps of throughput per ASIC for superior performance and future-ready infrastructure.

- Cisco C9350-48TX supports 10 Mbps to 10 Gbps (10M/100M/1G/2.5G/5G/10G) downlinks; 10 Mbps is full-duplex only. Cisco C9350-48TX features scalable StackWise-1.6 T technology, enabling up to 1.6 Tbps of stack bandwidth and supporting up to 448 multigigabit ports in an eight-switch stack.

- Cisco C9350-48TX supports up to 400G bandwidth for modular uplinks (C9350-NM-4C, C9350-NM-2C, C9350-NM-8Y), ensuring ample throughput for bandwidth-intensive enterprise applications.

10/100/1000M models

Cisco C9350 series 1G platforms deliver enterprise-grade performance with up to 48 copper downlink ports supporting 10/100/1000 Mbps and full IEEE 802.3bt Type 3 (60W) UPoE. In an eight-member StackWise-1.6T stack, they scale up to 384 x 1G ports and 384 x 60W UPoE ports with unified management and high availability. These models share the same modular components as their multigigabit counterparts, enabling consistent capabilities and simplified operations across deployments. Well-suited for wired access, smart building infrastructure, and IP-based endpoints, the 1G platforms support a broad range of enterprise access use cases.
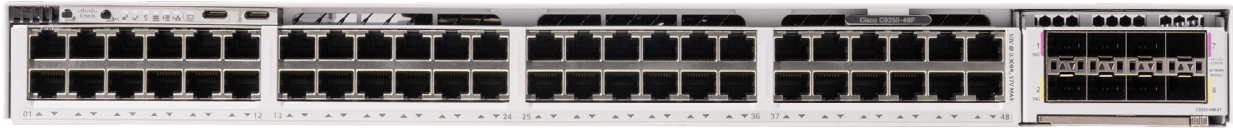
Cisco C9350-48U

C9350-48U use cases:

- Cisco C9350-48U provides 48 ports of 1 Gigabit Ethernet with 60W UPoE (IEEE 802.3bt Type 3) per port, delivering reliable power for HD IP cameras, PoE sensors, access control systems, and intelligent lighting.

- Cisco C9350-48U is ideal for enterprise access layer deployments in office campuses, education facilities, healthcare environments, and retail branches requiring high-density 1G connectivity and moderate-power PoE support.

C9350-48U highlights:

- Cisco C9350-48U integrates a single Silicon One A100/L ASIC to deliver consistent 1G switching with intelligent traffic management and hardware-based forwarding.

- Cisco C9350-48U features 48 downlink ports with 10M/100M/1G speeds, each delivering 60W of UPoE, for a total PoE budget of 2880W. This enables flexible connectivity and powers a range of access layer endpoints.

- Cisco C9350-48U supports up to 200G bandwidth for modular uplinks (C9350-NM-2C, C9350-NM-8Y) to accommodate high-throughput aggregation and core connections.

Cisco C9350-48P

C9350-48P use cases:

- Cisco C9350-48P offers 48 ports of 1 Gigabit Ethernet with 30W PoE, providing efficient power to devices such as IP cameras, sensors, and other PoE-powered equipment.

C9350-48P highlights:

- Cisco C9350-48P integrates a single Silicon One A100/L ASIC to deliver consistent 1G hardware-based forwarding.

- Cisco C9350-48P features 48 downlink ports with 10M/100M/1G speeds and 30W PoE per port, providing a total PoE budget of 1440W.

- Cisco C9350-48P supports up to 200G bandwidth for modular uplinks (C9350-NM-2C, C9350-NM-8Y).

Cisco C9350-48T

C9350-48T use cases:

- Cisco C9350-48T is purpose-built for enterprise access layer deployments requiring reliable, non-PoE 1G Ethernet connectivity, delivering consistent Layer 2/3 performance for high-density wired access environments.

C9350-48T highlights:

- Cisco C9350-48T integrates a single Silicon One A100/L ASIC, enabling consistent 1G hardware-based packet forwarding.

- Cisco C9350-48T supports up to 200G bandwidth for modular uplinks (C9350-NM-2C, C9350-NM-8Y).
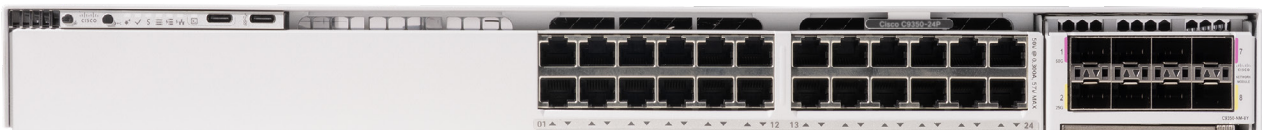
Cisco C9350-24U

C9350-24U use cases:

- Cisco C9350-24U features 24 ports of 1 Gigabit Ethernet, each providing 60W of UPoE (IEEE 802.3bt Type 3), ensuring reliable power delivery to a wide range of PoE devices.

C9350-24U highlights:

- Cisco C9350-24U uses a single Silicon One A100/L ASIC for efficient 1G switching and hardware-based packet forwarding.

- It offers 24 downlink ports with 10M/100M/1G speeds, each providing 60W UPoE, with a total PoE budget of 1440W to power network edge devices.

- Cisco C9350-24U supports up to 200G bandwidth for modular uplinks (C9350-NM-2C, C9350-NM-8Y).
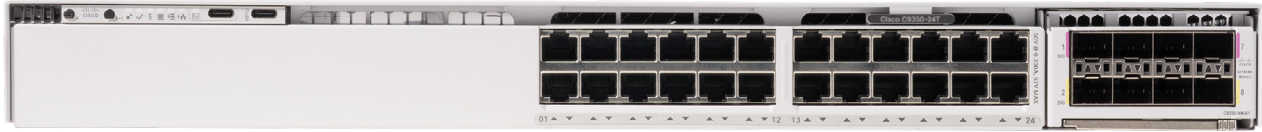
Cisco C9350-24P

C9350-24P use cases:

- Cisco C9350-24P provides 24 ports of 1 Gigabit Ethernet, each delivering 30W of PoE, efficiently powering devices like IP cameras, sensors, and other PoE-enabled equipment.

C9350-24P highlights:

- Cisco C9350-24P integrates a single Silicon One A100/L ASIC, enabling efficient 1G hardware-based packet forwarding.

- Cisco C9350 offers 24 downlink ports supporting 10M/100M/1G speeds, each delivering up to 30W of PoE, with a total PoE budget of 720W to power PoE devices.

- Cisco C9350-24P supports up to 200G bandwidth for modular uplinks (C9350-NM-2C, C9350-NM-8Y).

Cisco C9350-24T

C9350-24T use cases:

- Cisco C9350-24T is purpose-built for enterprise access layer deployments that require dependable, non-PoE 1G Ethernet connectivity, delivering consistent Layer 2/3 performance for wired client access.

C9350-24T highlights:

- Cisco C9350-24T integrates a single Silicon One A100/L ASIC, enabling consistent 1G hardware-based packet forwarding.

- Cisco C9350-24T supports up to 200G bandwidth for modular uplinks (C9350-NM-2C, C9350-NM-8Y).

Network modules

Cisco C9350 Series introduces new, exclusive field-replaceable uplink network modules, designed specifically for the Cisco C9350 platform. These modules, available in QSFP28 and SFP28/SFP56 configurations, support uplink speeds of 1G, 10G, 25G, 40G, 50G, and 100G, offering scalable connectivity to meet evolving network demands. The default switch configuration does not include the network module. When you purchase the switch, you can choose from the network modules described below:

Fiber network modules

C9350-NM-4C

C9350-NM-4C use cases:

- Cisco C9350-NM-4C is ideal for enterprise campus access switches requiring high-speed uplinks to aggregation or core layers, supporting high-throughput applications like wireless backhaul, video conferencing, and large-scale data access.

- Designed for scalable bandwidth and future-ready infrastructure in dense environments like smart buildings, campuses, and healthcare, with seamless 40G to 100G migration.

C9350-NM-4C highlights:

- Delivers up to 400 Gbps of total uplink bandwidth with four 100G/40G QSFP+ ports.

NOTE: The C9350-NM-4C is available only for the C9350-48HX and 48TX models.

C9350-NM-2C

C9350-NM-2C use cases:

- Cisco C9350-NM-2C is optimized for enterprise campus access switches, providing 2 x 100G uplinks to aggregation or core layers.

C9350-NM-2C highlights:

- Delivers up to 200 Gbps of total uplink bandwidth with four 100G/40G QSFP+ ports.

C9350-NM-8Y

C9350-NM-8Y use cases:

- Cisco C9350-NM-8Y is a flexible 8-port network module, supporting 8 x 25G/10G/1G or 4 x 50G configurations, providing high-speed multigigabit uplink options for enterprise campus deployments.

- Cisco C9350-NM-8Y offers scalability from 1G to 50G, enabling seamless adaptation to evolving campus requirements. It supports emerging technologies like 5G, Wi-Fi 6, and high-demand applications such as video conferencing and IoT.

C9350-NM-8Y highlights

- Cisco C9350-NM-8Y delivers up to 200 Gbps of total uplink bandwidth with 8 x 25G/10G/1G or 4 x 50G ports.

- By default, the Cisco C9350-NM-8Y uplink operates in 8 x 1/10/25G mode, providing flexible, high-speed connectivity for enterprise campus networks.

- Cisco C9350-NM-8Y can be converted to 4 x 50G mode for the top-row of ports, while the bottom-row of ports are automatically set to inactive when enabled, offering enhanced bandwidth for demanding applications.

Redundancy and stacking

Cisco StackWise-1.6T

The Cisco C9350 series features StackWise-1.6T, a high-performance standards-based Ethernet stacking architecture that delivers up to 1.6 Tbps of aggregate stacking bandwidth—the highest in the industry for enterprise access switching. This architecture supports stacking of up to eight switches using dedicated rear-panel connectors and high-speed stack cables, forming a single, unified system with distributed forwarding and a common control plane. StackWise-1.6T enables low-latency communication, hitless failover, and simplified management, providing exceptional scalability and resiliency. Its Ethernet-based design offers improved flexibility, allowing the stack to operate efficiently in demanding, high-density environments while maintaining operational simplicity.

Table 8. Supported stacking options

Model	Stacking support	Stacking bandwidth support	Optional stacking hardware	Number of members	Supported stack members
C9350 SKUs	StackWise-1.6T	1.6 Tbps	StackWise cable	8	Stacks with other Cisco C9350 models at StackWise-1.6T speeds (with same license level)

Cisco StackPower+

Cisco C9350 Series Smart Switches support StackPower+, an enhanced 55V power-sharing architecture that allows all power supplies across the stack to operate as a unified power pool. This enables redundant power capabilities with zero additional rack footprint, improving space and operational efficiency. With StackPower+, power from all connected supplies is intelligently consolidated and redistributed based on real-time demand, ensuring optimized delivery across the stack. By adding just one additional power supply to any member, you can increase available capacity or provide redundancy to other switches in the domain. StackPower+ also supports full 90W PoE on all ports, leveraging shared power through the stack. Up to four switches can be connected in a StackPower+ ring, delivering flexible, scalable, and resilient power management for demanding PoE deployments.

Table 9.   StackWise and StackPower cables

Cisco StackWise-1.6T and StackPower cables	
Part number	
STACK-T1A-50CM=	Cisco StackWise-1.6T 50 cm stacking cable spare
STACK-T1A-1M=	Cisco StackWise-1.6T 1 m stacking cable spare
STACK-T1A-3M=	Cisco StackWise-1.6T 3 m stacking cable spare
CAB-SPWR-35CM=	Cisco Catalyst StackPower cable 35 cm spare
CAB-SPWR-100CM=	Cisco Catalyst StackPower cable 100 cm spare

NOTE: Cisco C9350 Series Smart Switches are designed to work exclusively with the StackWise-1.6T and StackPower cables listed in Table 9. These switches are not compatible with stacking or StackPower cables from the Catalyst 9300 Series or other previous generation switches.

Software features

Cisco IOS XE, running on Cisco C9350 Series Smart Switches, delivers a robust, scalable, and secure platform tailored for the modern hybrid workplace. The Cisco C9350 series supports advanced Layer 2 and Layer 3 forwarding capabilities, increased forwarding and access control scale, and hardware-based encryption, delivering high performance and security for the modern enterprise campus.

Table 10. Feature highlights for Cisco C9350 Series Smart Switches

Model	C9350
Cisco StackWise 1.6T	✔
StackPower+	✔
Enterprise security	✔
Enterprise Quality of Service	✔
Layer 2 switching	✔
IP routing	✔
IP multicast routing	✔
IPv6 routing	✔
IPv6 multicast routing	✔
Software-Defined Access (SD-Access)	✔[1]
BGP EVPN	✔[1]
Flexible NetFlow (FNF)	✔
Programmability	✔
Out-of-band management	✔
Minimum software requirement	Minimum software requirement

[1] C9350 models: Feature is not available at FCS, but it is hardware capable.

For a detailed list of the latest software features available on the Cisco C9350 series per Cisco IOSXE release, please refer to the **Cisco Feature Navigator** tool.

For a detailed list of the software features available in each license, please refer to the **Unified Licensing** section below, or visit the **Cisco Switching Licensing** feature matrix.

Get more from your Cisco Catalyst switch with ISE

Compare platforms, determine common features between products, and identify unique product features.

Access Cisco Feature Navigator

Performance and scalability

The Cisco C9350 series powered by Silicon One A100/L ASIC, delivers up to 1.3 Tbps throughput, offering scalable performance and high-density connectivity. Its stackable architecture supports growing network demands with low-latency wire-speed efficiency.

Table 11. Performance and scalability features of Cisco C9350 switches

Feature	Cisco C9350
System switching	Up to 500G
ASIC switching capacity	Up to 1.3 Tbps (500G switching traffic + 800G stack)
ASICs	1-2x A100/L
Forwarding rate	Up to 3 Bpps (1.5 Bpps per ASIC)
DRAM	16 GB
Flash	18 GB
SSD capacity	Up to 240 GB
App-hosting DRAM allocation	8 GB
App-hosting CPU allocation	4 vCPU
App-hosting appgig ports	2 x 1/10G
VLAN IDs	4094
Active VLAN	Up to 4000
PVST instances	Up to 1000
STP virtual ports (Port*VLANs) for PVST	16,000

Feature	Cisco C9350
STP virtual ports (Port* VLANs) for MST	100,000
Switched virtual interfaces (SVIs)	2000
Jumbo frames	9216
Total number of MAC addresses	Up to 64,000
Total number of IPv4 routes	Up to 192,000
Total number of IPv6 routes	Up to 96,000
Address resolution protocol (ARP) entries	Up to 64,000
Neighbor discovery protocol (NDP) entries	Up to 4000
IGMP/MLD snooping entries	Up to 8000/4000
Multicast routes	Up to 8000/4000
QoS ACL scale (IPv4/IPv6)	Up to 2000/1000
Security ACL scale (IPv4/IPv6)	Up to 5000/2500
NetFlow entries (IPv4/IPv6)	Up to 64,000/32,000
Packet buffer	Up to 36 MB (18 MB per ASIC)

[1] Multiple Security ACL types are supported. Only the first type can use the expanded scale.

Table 12. Bandwidth specification

SKU	Bandwidth specification	Switching capacity with stacking	Forwarding rate (MPPS)	Forwarding rate with stacking (MPPS)
C9350-24T	448G	2048G	333.312	1523.712
C9350-48T	496G	2096G	369.024	1559.424
C9350-24P	448G	2048G	333.312	1523.712
C9350-48P	496G	2096G	369.024	1559.424
C9350-24U	448G	2048G	333.312	1523.712
C9350-48U	496G	2096G	369.024	1559.424
C9350-48HX	1760G	3360G	1309.44	2499.84
C9350-48TX	1760G	3360G	1309.44	2499.84

SDM templates

Cisco C9350 series switches utilize predefined software database manager (SDM) ASIC templates to allocate hardware resources efficiently, depending on the switch's role in the network. These standard SDM templates are designed to optimize table sizes and performance for access and edge deployments.

The following sections describe the flexible ASIC SDM templates for the C9350 series.

Default SDM ASIC template

The Cisco C9350 series comes with a default SDM template optimized for enterprise access use cases, providing balanced resources for Layer 2 and Layer 3 forwarding, ACLs, and QoS, without requiring additional configuration.

The following table describes the default SDM ASIC (access) template for the C9350 series.

Table 13. SDM template specifications

Feature	Cisco C9350
MAC addresses	64,000
IP host routes[1]	64,000
IP LPM routes[1]	192,000
IP multicast routes[1]	8000
IGMP/MLD snooping[1]	8000
Security/object groups	24,000
NetFlow entries[1]	32,000 ingress, 32,000 egress
Security ACLs[1]	5000 to 32,000[2]
QoS ACLs[1]	1000
PBR/NAT	4000
GRE tunnels	1024

[1] IPv4 and IPv6 entries coexist in the same tables, but IPv6 entries require two entries.

[2] Multiple Security ACL types are supported. Only the first type can use the expanded scale.

Management

The ability to manage these devices from the cloud brings enhanced scalability, flexibility, and efficiency through central configuration management, monitoring, and troubleshooting. Users opting to leverage the cloud-native capabilities of IOS XE retain advanced control from the cloud through the implementation of Cloud CLI to access read and write commands based on their selected operating mode.

Unified experience

Cisco C9350 Series Smart Switches deliver a seamless onboarding experience to the management mode of your choice, allowing you to select the management options that best match your operational needs.

Cloud management via the Meraki dashboard

The Cisco Meraki dashboard is a cloud-native network management platform that streamlines the provisioning, configuration, and monitoring of your Cisco C9350 Series Smart Switches while reducing IT overhead. Through the guided onboarding workflow, you can choose the operating mode that fits your needs.

1. **Configuration source: Cloud:** Full cloud-managed provisioning and monitoring plus read-only cloud CLI terminal for advanced troubleshooting via the Meraki dashboard. For details on cloud management with cloud configuration, **click here**

2. **Configuration source: Device**[1]: Configuration through console, SSH, or CLI, complemented by centralized monitoring and read/write cloud CLI terminal via the Meraki dashboard. For details on cloud management with device configuration, **click here**

The Cisco Meraki dashboard also supports inventory and license management for Cisco C9350 Series Smart Switches without fully onboarding them for cloud or device configuration.

[1] Available in a future release

On-premises management

Cisco Catalyst™ Center, formerly Cisco DNA Center, is a powerful on-premises network controller and management dashboard that empowers you to take charge of your network, optimize your Cisco investment, and lower your IT spending. Catalyst Center provides a single dashboard for every fundamental management task to simplify running your network. With this platform, IT can respond to changes and challenges faster and more intelligently.

Catalyst Center provides coverage for Cisco enterprise switching, routing, and mobility products. For a complete list of Cisco products supported, please see our **compatibility matrix**, which is updated regularly.

For more information on Catalyst Center support, **click here**.

Licensing

Unified licensing

Unified licensing in a Cisco Networking Subscription or an Enterprise Agreement is available for Cisco C9350 Series Smart Switches.

To learn more about the Cisco Networking Subscription, go to the **data sheet**.

Cisco Smart Accounts

Licenses are managed on-premises through Cisco Smart Accounts. For a more detailed overview on Licensing, go to **Cisco Software Licensing and Smart Accounts**.

Creating Smart Accounts using the Cisco Smart Software Manager (Cisco SSM) enables you to order devices and licensing packages and manage your software licenses from a centralized website. You can set up Cisco SSM to receive daily email alerts and to be notified of expiring add-on licenses that you want to renew.

Cisco Smart Licensing is a flexible licensing model that provides you with an easier, faster, and more consistent way to purchase and manage software across the Cisco portfolio and across your organization. And secure—you control what users can access.

Cisco Enterprise Agreements

The Cisco Enterprise Agreement (EA) is a flexible licensing solution that simplifies the purchase, management, and deployment of Cisco technologies.

By combining multiple Cisco software and services into one agreement, the EA provides easy access to a wide range of products, including networking, security, collaboration, and data center solutions.

This approach reduces administrative tasks, offers predictable costs, and allows for scalability and adaptability. With the flexibility of the Cisco EA, organizations can drive digital transformation and innovation while maintaining control over their IT investments. For more information, go to **Cisco Enterprise Agreement**.

Migration essentials

Customer stories

Read, hear, and watch what our customers have to say about how Cisco technology is pushing the limits to bring better, more secure outcomes for them and those they serve.

See what customers are saying.

Trials and offers

Offers

To connect with a Cisco sales expert, build your own estimate, or find a partner, visit our **How to Buy hub**.

Ordering information

The following table lists the ordering information for switches, network modules, stacking cables, and accessories that are commonly used with Cisco C9350 Series Smart Switches, as well as the Cisco Catalyst Center and Cisco Meraki licenses respectively.

For a detailed overview of the ordering process, please visit the **Cisco C9350 Series Smart Switches Ordering Guide**

We recommend working with a Cisco partner to purchase.

· **Contact sales**

· **Find a partner**

· **Create an estimate**

Warranty

The following table provides information about the Cisco C9350 series product warranty.

Table 14. Limited Lifetime Warranty (LLW) details

Description	Cisco LLW
Devices covered	Applies to Cisco C9350 Series Smart Switches.
Warranty duration	As long as the original customer owns the product.
End-of-life policy	In the event of discontinuance of product manufacture, Cisco warranty support is limited to five (5) years from the announcement of discontinuance.
Hardware replacement	Cisco or its service center will use commercially reasonable efforts to ship a replacement part to the customer's address of record on the next business day after issuance of a valid RMA request. Actual delivery times may vary depending on customer location. Taxes and duties may apply and will be borne by the recipient of the replacement part.
Effective date	Hardware warranty commences from the date of shipment to customer (and in case of resale by a Cisco reseller, not more than 90 days after original shipment by Cisco).
Cisco.com access	Warranty allows guest access only to Cisco.com.

Sustainability profile

Cisco is embedding sustainability into the product lifecycle, from manufacturing to end of use. Designed with consideration for **Cisco Circular Design Principles**, our products feature both individual and portfolio-wide programs and innovations, including those that address efficient architecture design, power consumption, energy management, packaging sustainability, and takeback. These elements are pivotal in reducing operational costs and advancing net-zero greenhouse gas (GHG) emissions targets and other sustainability-related ambitions.

Information about Cisco environmental, social, and governance (ESG) initiatives and performance is available in the **Cisco Purpose Reporting Hub**. Information regarding Cisco compliance with applicable environmental laws and regulations is available in the **Environmental Compliance** section.

Table 15. Sustainability references

Sustainability topic		Description
Power	Cisco Power Calculator	The Cisco Power Calculator tool provides an estimation of power for Cisco C9350 Series Smart Switches and allows customers to calculate the power supply requirements for a specific Power over Ethernet (PoE) configuration. **Cisco Power Calculator**
	Power management configuration	The power management chapter in the System Management Configuration Guide provides detailed information on power management features and configurations available for Cisco C9350 Series Smart Switches. The features discussed include power supply modes, module operating states, and power-budgeting considerations.
	Auto-off ports without small form-factor pluggable (SFP)	Once enabled, the system checks for the presence of SFPs in fiber ports on a regular basis and turns on SerDes when SFP is detected. If no SFP is detected, the system will keep SerDes off to save energy.
	Auto-off port LEDs	Once enabled, port LEDs (light-emitting diodes) will stay depowered, saving energy until a link event is triggered or manually enabled by command line interface (CLI) or mode button.
	Auto-off StackPower power supply units (PSU)	Once enabled, the switch stack will automatically shut off power supplies that are beyond the power need of 50% load-to-supply ratio and N+1 redundancy.

Sustainability topic		Description
Energy management	Catalyst Center dashboard	The Catalyst Center dashboard offers comprehensive energy management capabilities, allowing users to monitor energy usage, energy mix, costs, and greenhouse gas emissions in real time. Available with release 3.1.3. **Catalyst Center release notes**
	Environmental monitoring configuration	The environmental monitoring chapter in the System Management Configuration Guide provides guidelines for configuring monitoring of environmental conditions of chassis components.
	Cisco Smart Power Framework	The Cisco Smart Power Framework is an extensible power management framework that employs a domain-based hierarchical architecture for power management across network devices. It utilizes a signaling mechanism within the network infrastructure to communicate power data and enforce power policies on endpoints. This allows for granular control over device power states and the implementation of energy-saving measures across the network.
	Environmental impact reports	The Cisco environmental impact reports page provides detailed lifecycle assessments, information about product carbon footprints, and other data to help users understand the environmental impact of Cisco hardware. **Environmental Impact Reports**
Ecolabels	80 PLUS Platinum/ Titanium Certified power supply units (PSUs)	Cisco C9350 Series Smart Switches support high-efficiency power supply units. 80 PLUS platinum certified PSUs offer up to 94% efficiency at 50% load and titanium PSUs reach up to 96% efficiency at 50% load at 230V input. **Power supply units**
	ENERGY STAR®	Cisco C9350 Series Smart Switches are ENERGY STAR certified and meet energy-efficiency specifications set by the U.S. Environmental Protection Agency (EPA), helping customers save energy and money while helping to protect the environment, improve air quality, and protect public health.

Sustainability topic		Description
Materials, modularity, and reuse	Hardware standardization and modularity	Cisco C9350 Series Smart Switches use standard subassemblies and common modular components across products to streamline production and enhance reusability, repairability, and upgradability.
	Simplified architecture	Cisco C9350 Series Smart Switches offer a simplified architecture by consolidating multiple discreet ASIC/NPU components into a central system-on-chip (SoC) architecture, providing multiple discrete functions in a more integrated design.
	Recycled content	Cisco C9350 Series Smart Switches contain up to 75% post-consumer recycled content in Cisco-designed plastic components.
	Powder-coat finish	Cisco C9350 Series Smart Switches use a powder-coating finish. In comparison to wet paints, a powder-coating finish reduces the amount of harmful solvents used and amount of volatile organic compounds (VOCs) emitted during the painting process.
	Bezel-free design	Cisco C9350 Series Smart Switches use a bezel-free design, reducing plastic usage.
	Cisco Takeback and Reuse	This program allows customers to return used equipment for responsible reuse and recycling. **Takeback and Reuse Program**
	Cisco Refresh	This program offers certified remanufactured and refurbished products, providing cost-effective alternatives to new equipment. **Cisco Refresh**

Sustainability topic		Description
Packaging	Removal of single-use plastic bags	The Cisco C9350 Series Smart Switches Accessory Kit (C9350-ACC-KIT) is packaged with fiber-based materials, removing single-use plastic bags.
	Foam reduction	Expanded foam end caps used in packaging hardware are now replaced with recycled HDPE thermoform cushioning end caps (made of at least 50% post-consumer recycled content) or fiber-based cushions (PID dependent). **Circular economy and packaging sustainability**
	Accessory opt-in	Accessory opt-in enables reduced materials use and waste by allowing customers to select whether to include the accessory kit. The default is now to exclude it unless required.
General	Sustainability inquiries	Contact this alias for questions and information related to Cisco's general and product-specific sustainability initiatives. **csr_inquiries@cisco.com**
	Cisco policies, positions, and guides	Links to select Cisco environmental sustainability policies, positions, and guides are provided in the "Policies, positions, and guides" section of the Cisco Purpose Reporting Hub. **Policies, positions, and guides**
	Cisco Green Pay	This page provides an overview of Cisco Green Pay, a financing program aimed at promoting more sustainable technology adoption by providing flexible payment options. **Green Pay**

The information presented in this data sheet is based on the most accurate and reliable information available at the time of publication. This information should not be interpreted as a definitive, exhaustive, or permanent representation of product performance or features. This information may be subject to future updates as new data becomes available.

Appendix

Safety and compliance

Chassis

The section below lists the safety and compliance information for the Cisco c9350 Series Smart Switch chassis.

Safety and certifications	EMC and EMI compliance
· IEC 60950-1 plus Am1, Am2, Am9, Am10, Am11, Am12, and all deviations and differences · EN 60950-1; 2006 · IEC 62368-1 Second Edition with all deviations and differences · UL 60950-1, Second Edition · UL 62368-1, Second Edition · AS/NZS 60950.1.2011 · CAN/CSA-C22.2 No. 60950-1-07 · CAN/CSA-C22.2 No. 62368-1-14 · GB 4943-95 · NOM-019-SCFI-1998	· 47 CFR Part 15 Class A CNS13438: 2006 Class A EN 300 386 V1.6.1 · EN 61000-3-2: 2014 · EN 61000-3-3: 2013 · EN 300 386 V1.6.1 · EN 55032: 2012/ AC:2013 Class A EN 55032:2015 Class A · EN 55024: 2010 + A1: 2015 · ICES-003 Issue 6: 2016 Class A · KN 35: 2015 · KN 32: 2015 Class A · TCVN 7189: 2009 Class A · TCVN 7317: 2003 · CISPR 32 Edition 2 Class A · CISPR 24: 2010 + A1: 2015 · V-2/2015.04 Class A V-3/2015.04 Class A · EN55024: 2010 + A1: 2015 · KN35: 2015 · TCVN 7317: 2003

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Time to switch it up

Cisco Capital	Cisco Capital flexible payment solutions offer choices so you get the tech you need and the business outcomes you want.
Explore Cisco Capital	https://www.cisco.com/site/us/en/buy/payment-solutions/index.html
Find a partner	Solve your business challenges by finding a Cisco partner authorized to design, sell, and support custom solutions.
Meet our partners	https://www.cisco.com/site/us/en/partners/connect-with-a-partner/index.html
Community	Cisco Community is an active and collaborative place to learn more about our products and ask questions of peers and Cisco experts.
Join the community	https://community.cisco.com/
Cisco Services	Transform with more ease and less risk while making sure your technology delivers tangible business value.
Browse Cisco Services	https://www.cisco.com/site/us/en/services/index.html