

# CISCO CATALYST 9200 SERIES



### CISCO CATALYST 9000 FAMILY

#### 9200 Series

Fixed stackable switches for enterprise-class deployments for small branches and midsize campuses

#### 9300 & 9300X Series

Fixed stackable switches for enterprise-class lean branch and campus access networks

#### 9400 & 9400X Series

Modular switches for enterprise-class midsize and large campus access networks

#### 9500 & 9500X Series

Fixed switches for enterprise-class midsize and large campus-core networks

#### 9600 & 9600X Series

Modular switches for enterprise-class midsize and large campus-core networks

The Catalyst 9200 series was designed for mid-sized and large-scale enterprises as well as for service providers that require high-performance, reliable, and secure network hardware. These switches were designed to help users simplify complexity, optimize IT, and reduce operational costs.



### **Product Highlights**

### Up to 160 Gbps of Stacking Bandwidth

The 9200 series feature StackWise-160, allowing up to 160 Gbps of stacking bandwidth. Users can stack up to 8 switches together to form a single logical unit. This enables users to have a powerful and flexible solution for building resilient and high-performance networks. Benefits include:

<u>Increased Bandwidth</u>: More data can be transferred between the switches in the stack, thus resulting in improved performance and faster data transfer rates.

Improved Resilience: Utilizing switches in a stack allows for better load balancing and redundancy. Users can have confidence knowing that if one switch in the stack happens to fail, the remaining switches will continue working without interruption, ensuring a high degree of network availability.

<u>Simplified Management</u>: A single logical stack of switches is significantly easier to manage than individual switches. Since all the switches in the stack can be managed as a single entity through a single IP address, it makes configuring and managing the switches significantly easier, while also reducing the frequency of errors and need for troubleshooting.

<u>Scalability</u>: The ability to add switches into a stack when needed makes it easy to scale your network!

#### Up to 48 Ports PoE+

The 9200 series feature certain models with up to 48 ports of PoE+ power. These ports allow users to power a wide variety of network devices including VoIP phones, wireless access points, cameras, and other IoT devices directly through the Ethernet cable. This has a number of benefits, including:

<u>Simplified Deploymen</u>t: When utilizing PoE ports, there's no need to be concerned with locating readily available power outlets nearby for a deployment. This makes it easier to install in locations where power is not readily available such as ceilings or walls. Having devices powered directly through the Ethernet cable simplifies deployments and also helps to reduce installation costs.

Increased Energy Efficiency: Utilizing PoE+ allows for a more efficient use of power as power is provided to devices only when needed. This helps to reduce wasted power, lower energy costs, and lower the environmental impact of a network.

Improved Flexibility: When powering devices via PoE+, it's easy to move and reconfigure devices without the need for additional power sources, allowing users a high level of flexibility in creating and re-arranging their networks.



### **Product Highlights**

# Increased Resiliency with Field Replaceable Units (FRU)

The 9200 series features allow for increased resiliency thanks to field replaceable units (FRU) and redundant power supplies, fans, and modular uplinks. These components can be easily removed and replaced without special tools or extensive technical expertise. NOTE: The 9200L switches do not feature FRU fans or modules.

This has a number of benefits including:

<u>Quicker Repair Time</u>s: When a component fails, it can be quickly and easily replaced with a new one, thus reducing downtime and miminizing impacts on the network.

Lower Maintenance Costs: The cost to replace a single component is significantly lower than having to replace an entire switch. FRU components dramatically lower maintenance costs as only the necessary parts need to be purchased and installed.

<u>Improved Network Reliability</u>: It goes without saying that being able to quickly replace faulty components can help improve a network's reliability by reducing the time that the device is offline.

### Flexible Downlink Options

The 9200 series features flexible downlink options to meed different network requirements. Downlink options available include data, PoE+, or mGig. This means there's something for every budget and customization need from future-proofing to scalability.

### Flexible Downlink Options

The 9200 series features Fast PoE, meaning that when power is restored to a switch, Fast PoE starts delivering power to endpoints without waiting for the operating system to fully load. This helps to speed up the time for the endpoint to start up.

#### **Perpetual PoE**

The 9200 series features Perpetual PoE which maintains the PoE+ power during a switch reload. This is important for critical endpoints such as medical devices and for IoT endpoints such as PoE powered lights, so that there is no disruption during a reboot.





### 9200L VS 9200



9200L

- · Fixed Uplinks
- Up to 80GB Stacking Bandwidth
- Smaller lookup tables
- No field-replaceable fans or modules

9200

- Modular Uplinks
- Up to 160GB Stacking Bandwidth
- · Larger lookup tables
- Field-replaceable fans, power supplies, and uplinks

The Catalyst 9200 series features both fixed and modular uplink models. The 9200L models feature fixed uplinks, while the 9200 models feature modular uplinks.



### **STACKING**

MODEL	STACKING SUPPORT	STACKING BANDWIDTH	STACKING HARDWARE	NUMBER OF MEMBERS	SUPPORTED STACK MEMBERS
Modular Models (9200 SKUs)	StackWise-160	160 Gbps	C9200-STACK-KIT	8	Other C9200 models w/same license level
Fixed Models (9200L SKUs)	StackWise-80	80 Gbps	C9200L-STACK-KIT	8	Other C9200L models w/same license level

NOTE: Mixed stacking is NOT supported. You cannot stack fixed 9200L models with modular 9200 models, or with any other Catalyst series such as 2960-X, etc.





# SWITCH MODELS & CONFIGURATIONS

MODELS	FRU POWER SUPPLY	FRU FANS	MODULAR UPLINKS	STACKING BANDWIDTH SUPPORT	SD-ACCESS SUPPORT
Modular Uplink Models (C9200 Enhanced VN SKUs)	Yes	Yes	Yes	160 Gbps	Yes (32 Virtual * Networks)
Modular Uplink Models (C9200 SKUs)	Yes	Yes	Yes	160 Gbps	Yes (4 Virtual Networks)
Fixed Uplink Models (C9200L SKUs)	Yes	No	No	80 Gbps	Limited (1 Virtual Network)
Compact Models (C9200CX SKUs)	Fixed Internal Power Supply	Fanless	No	None	Yes (16 Virtual Networks)

<sup>\*</sup>C9200-24PB-A, C9200-48PB-A, SKUs support 32 Virtual Networks. These SKUs cannot be stacked with C9200 SKUs with 4 Virtual Networks.



# CATALYST 9200 SERIES SWITCH CONFIGURATIONS

#### Modular Uplink Models

Model	Downlinks Total 10/100/1000 or PoE+ Copper Ports	Uplink Configuration	Default Primary Power Supply	Fans
C9200-24T	24 Ports Data	Modular Uplink Options	PWR-C6-125WAC	FRU Redundant
C9200-24P	24 Ports Full PoE+	Modular Uplink Options	PWR-C6-600WAC	FRU Redundant
C9200-24PB	24 Ports Full PoE+	Modular Uplink Options	PWR-C6-600WAC	FRU Redundant
C9200-24PXG	24 ports full PoE+ (8 mGig ports up to 10G, 16 ports up to 1G)	Modular Uplink Options	PWR-C6-600WAC	FRU Redundant
C9200-48T	48 ports data	Modular Uplink Options	PWR-C6-125WAC	FRU Redundant
C9200-48P	48 ports full PoE+	Modular Uplink Options	PWR-C6-1KWAC	FRU Redundant
C9200-48PL	48 Ports partial PoE+	Modular Uplink Options	PWR-C6-600WAC	FRU Redundant
C9200-48PB	48 ports full PoE+	Modular Uplink Options	PWR-C6-1KWAC	FRU Redundant
C9200-48PXG	48 ports full PoE+ (8 mGig ports up to 10G, 40 ports up to 1G)	Modular Uplink Options	PWR-C6-1KWAC	FRU Redundant



# CATALYST 9200 SERIES SWITCH CONFIGURATIONS

#### Fixed Uplink Models

Model	Downlinks Total 10/100/1000 or PoE+ Copper Ports	Uplink Configuration	Default Primary Power Supply	Fans
C9200L-24T-4G	24 Ports Data	4x 1G fixed uplinks	PWR-C5-125WAC	Fixed Redundant
C9200L-24P-4G	24 Ports Full PoE+	4x 1G fixed uplinks	PWR-C5-600WAC	Fixed Redundant
C9200L-48T-4G	48 ports data	4x 1G fixed uplinks	PWR-C5-125WAC	Fixed Redundant
C9200L-48P-4G	48 ports full POE+	4x 1G fixed uplinks	PWR-C5-1KWAC	Fixed Redundant
C9200L-48PL-4G	48 Ports partial PoE+	4x 1G fixed uplinks	PWR-C5-600WAC	Fixed Redundant
C9200L-24T-4X	24 ports data	4x 1/10G fixed uplinks	PWR-C5-125WAC	Fixed Redundant
C9200L-24P-4X	24 ports full PoE+	4x 1/10G fixed uplinks	PWR-C5-600WAC	Fixed Redundant
C9200L-48T-4X	48 ports data	4x 1/10G fixed uplinks	PWR-C5-125WAC	Fixed Redundant
C9200L-48P-4X	48 ports full PoE+	4x 1/10G fixed uplinks	PWR-C5-1KWAC	Fixed Redundant
C9200L-48PL-4X	48 Port partial PoE+	4x 1/10G fixed uplinks	PWR-C5-600WAC	Fixed Redundant
C9200L-24PXG-4X	24 ports full PoE+ (8 mGig ports up to 10G, 16 ports up to 1G)	4x 1/10G fixed uplinks	PWR-C5-600WAC	Fixed Redundant
C9200L-48PXG-4X	48 ports full POE+ (12 mGig ports up to 10G, 36 ports up to 1G)	4x 1/10G fixed uplinks	PWR-C5-1KWAC	Fixed Redundant
C9200L-24PXG-2Y	24 ports full PoE+ (8 mGig ports up to 10G, 16 ports up to 1G)	2x 1/10/25G fixed uplinks	PWR-C5-600WAC	Fixed Redundant
C9200L-48PXG-2Y	48 ports full POE+ (8 mGig ports up to 10G, 40 ports up to 1G)	2x 1/10/25G fixed uplinks	PWR-C5-1KWAC	Fixed Redundant



# CATALYST 9200 SERIES SWITCH CONFIGURATIONS

#### **Compact Models**

Model	Downlinks Total 10/100/1000 or PoE+ Copper Ports	Uplink Configuration	Default Primary Power Supply	Fans
C9200CX-12T-2X2G	12 ports data	2x 1G copper, 1x 1G CU PD 802.3bt Class 6, 2x 10G SFP+ fixed uplinks	Powered by 802.3bt class 6 PoE Optional auxiliary 80W AC or DC power adaptor	Fanless
C9200CX-12P-2X2G	12 ports PoE+	2x 1G copper, 2x 10G SFP+ fixed uplinks	315W AC internal	Fanless
C9200CX-8P-2X2G	8 ports full PoE+	2x 1G copper, 2x 10G SFP+ fixed uplinks	315W AC internal	Fanless
C9200CX-8UXG-2X	8 ports UPOE (4 mGig ports up to 10G, 4 ports up to 1G)	2x 10G SFP+ fixed uplinks	315W AC internal	Fanless
C9200CX-12P-2XGH	12 ports PoE+	2x 1G copper, 2x 10G SFP+ fixed uplinks	315W HVDC/AC internal	Fanless
C9200CX-8P-2XGH	8 ports full PoE+	2x 1G copper, 2x 10G SFP+ fixed uplinks	315W HVDC/AC internal	Fanless
C9200CX-8UXG-2XH	8 ports UPOE (4 mGig ports up to 10G, 4 ports up to 1G)	2x 10G SFP+ fixed uplinks	315W HVDC/AC internal	Fanless



## 9200 NETWORK MODULE COMPATIBILITY MATRIX

	C9200-NM-4G	C9200-NM-4X	C9200-NM-2Y	C9200-NM-2Q
C9200-24T-A	Yes	Yes	No	No
C9200-24T-E	Yes	Yes	No	No
C9200-24P-A	Yes	Yes	No	No
C9200-24P-E	Yes	Yes	No	No
C9200-48T-A	Yes	Yes	No	No
C9200-48T-E	Yes	Yes	No	No
C9200-48P-A	Yes	Yes	No	No
C9200-48P-E	Yes	Yes	No	No
C9200-24PB-A	Yes	Yes	No	No
C9200-48PB-A	Yes	Yes	No	No
C9200-48PL-A	Yes	Yes	No	No
C9200-48PL-E	Yes	Yes	No	No
C9200-24PXG-A	No	Yes	Yes	Yes
C9200-24PXG-E	No	Yes	Yes	Yes
C9200-48PXG-A	No	Yes	Yes	Yes
C9200-48PXG-E	No	Yes	Yes	Yes