Cisco 8200 Series Secure Routers

A Part of the Cisco 8000 Series Secure Routers Family.

Contents

Overview 2

Models and specifications 4

Software management 9

Ordering information 9

Warranty 9

Sustainability profile 10

Appendix 15

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Overview

Cisco 8200 Series Secure Routers deliver secure networking simplified. Powered by the all-new secure networking processor and the unified Cisco secure networking platform, Cisco 8200 Series Secure Routers deliver robust, platform-level security, advanced performance engineering through routing and SD-WAN, and on-premises, infrastructure-as-code, or cloud management flexibility that enables businesses to seamlessly scale and grow. Each class of secure routers is designed to deliver risk reduction, enhanced reliability, and future readiness.

Platform highlights

Designed for medium branch deployments, Cisco 8200 Series Secure Routers combine robust security, advanced performance engineering, and flexible management options. These routers offer seamless connectivity, dynamic path selection, and unified security enforcement, ensuring resilient operations and simplified IT overhead as your network grows. With integrated security and support for high-speed 10G interfaces, these platforms deliver scalable and reliable performance for modern WAN edge deployments. Whether used for traditional routing or SD-WAN applications, the Cisco 8200 Series supports AI-driven growth to meet digital branch demands.

Key features

Hardware-accelerated security and networking	• Dedicated secure networking processor for fast cryptography and deep packet inspection • Hardware acceleration ensures high throughput with robust threat protection
Fanless model for medium branch	• Quiet, reliable fanless SKU ideal for noise-sensitive or space-constrained sites • Reduced moving parts for lower maintenance and enhanced durability
Integrated branch connectivity	• Combines NGFW security, routing, and SD-WAN in one unified platform • Simplifies branch infrastructure and management with all-in-one secure access
Secure networking with PQC readiness	• Future-proofs branch security with advanced, quantum-resistant encryption

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Models and specifications

Cisco 8200 Series Secure Routers offer both fixed and modular configurations to meet diverse networking needs and include four models: Cisco C8235-E-G2, C8231-E-G2, C8235-G2 and C8231-G2.

Cisco C8235-E-G2 and **C8231-E-G2** are 1 RU modular platforms with 1 NIM slot plus 2 x 10 Gbps SFP/SFP+, and 2 x 2.5G Multigigabit RJ-45 ports.

Figure 1. Front View of Cisco C8235-E-G2 Secure Router

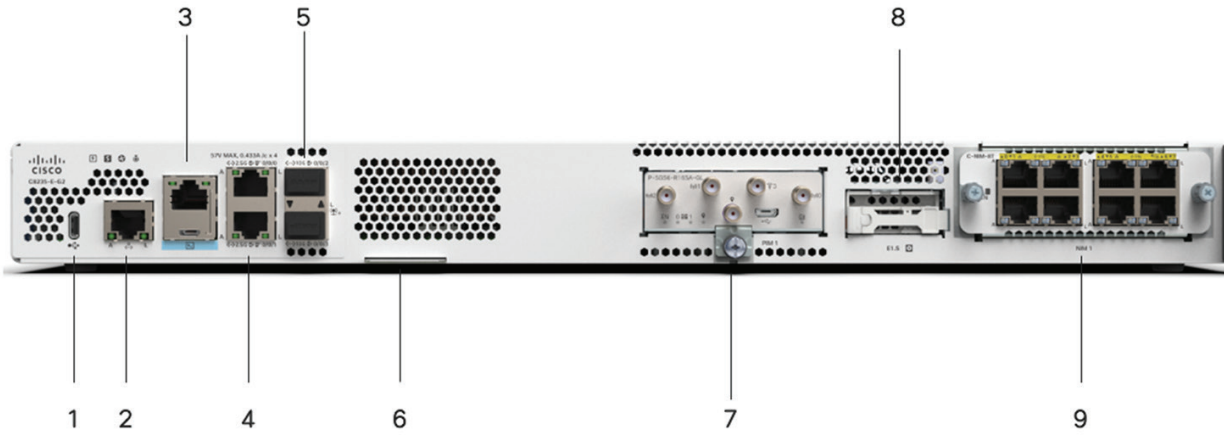

Table 1. Front Panel of Cisco C8235-E-G2 Secure Router

Label	Description
1	USB 3.0 Type C Storage
2	Management RJ-45 port
3	Console RJ45/Micro-USB port
4	2x 2.5G Multigigabit RJ45 ports
5	2x 10G SFP/SFP+ ports

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6	Label tray
7	PIM Slot
8	E1.S storage slot
9	NIM slot
10	RFID

Figure 2. Rear View of a Cisco C8235-E-G2 Secure Router

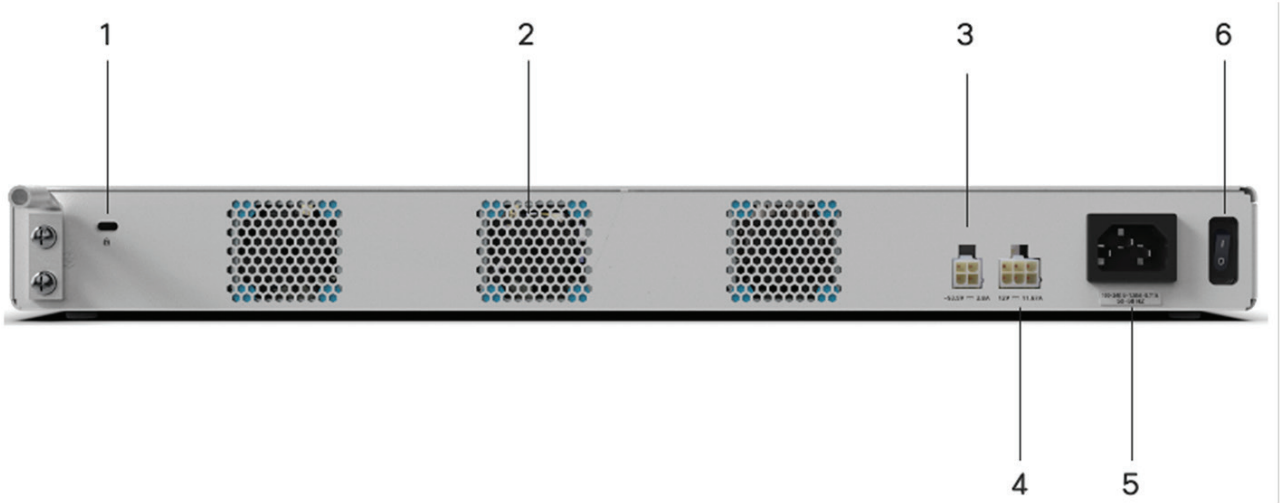

Table 2 Rear Panel of a Cisco C8235-E-G2 Secure Router

Label	Description
1	Kensington lock, ground screw
2	Fan
3	PoE adapter input
4	12V DC – secondary PSU input
5	AC – primary power socket
6	Power switch

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Cisco C8235-G2 is a fixed platform and provides 2 x 10 Gbps SFP/SFP+ and 8 x 2.5G Multigigabit RJ-45 ports.

Figure 3. Front View of a Cisco C8235-G2 Secure Router

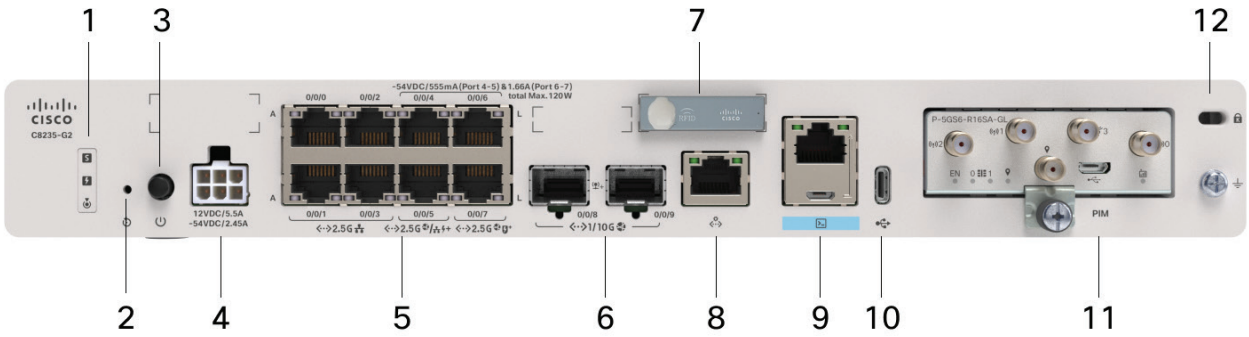

Table 3. Front Panel of Cisco C8235-G2 Secure Router

Label	Description
1	Status LEDs, blue beacon LED
2	Reset button
3	Power button
4	Power supply input (AC/AC + PoE)
5	8x 2.5G Multigigabit RJ-45 ports
6	2x 10G SFP/SFP+ ports
7	RFID
8	Management RJ-45 port
9	Console RJ-45 port/Micro-USB console port
10	USB 3.0 Type-C Storage
11	PIM slot
12	Kensington lock, ground screw

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Cisco C8231-G2 is a fixed platform and provides 2 x 10 Gbps SFP/SFP+, 4 x 2.5G Multigigabit RJ45 and 4 x 1G RJ45 ports.

Figure 4. Front View of a Cisco C8231-G2 Secure Router

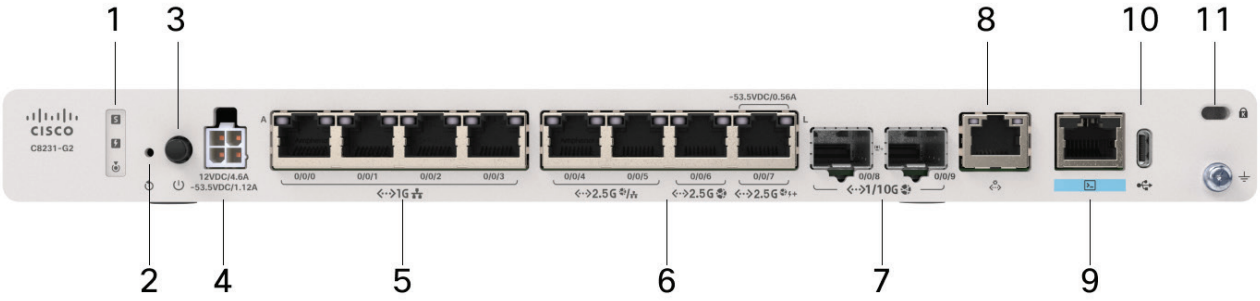

Table 4. Front panel of a Cisco C8231-G2 Secure Router

Label	Description
1	Status LEDs, blue beacon LED
2	Reset button
3	Power button
4	Power supply input (AC/AC + PoE)
5	4x 1G RJ45 ports
6	4x 2.5G Multigigabit RJ-45 ports
7	2x 10G SFP/SFP+ ports
8	Management RJ-45 port
9	Console RJ-45 port
10	USB 3.0 Type-C Storage
11	Kensington lock, ground screw

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Table 5. Technical specifications

	Cisco C8235-E-G2 and Cisco C8231-E-G2	Cisco C8235-G2	Cisco C8231-G2
Interfaces and Slots			
WAN ports	2x 10G SFP/SFP+ 2x 2.5G mGig RJ-45 (2x UPoE+)	2x 10G SFP/SFP+ 2x 2.5G mGig RJ-45 (2x UPoE+)	2 x 10G SFP/SFP+ 2 x 2.5G mGig RJ45 (1x PoE+)
Flex ports	-	2x 2.5G mGig RJ-45 (2x PoE+)	2 x 2.5G mGig RJ-45
LAN ports	-	4x 2.5G mGig RJ-45	4 x 1G RJ-45
Expansion slots	1x NIM	-	-
Cellular slot	1x PIM	1x PIM	-
Management port	1x RJ-45 OOB Mgmt 1x RJ-45/1x micro-USB console	1x RJ-45 OOB Mgmt 1x RJ-45/1x micro-USB console	1 x RJ-45 OOB Mgmt 1 x RJ-45 console
Memory and storage			
DRAM	16 GB (for C8235-E-G2) 8 GB (for C8231-E-G2)	16 GB	8 GB
Storage	16 GB Upgradeable to 600 GB	16 GB	16 GB
Power supply (default)	140 W AC (internal default)	66 W AC (default – external adapter)	66 W AC (default – external adapter)

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	Cisco C8235-E-G2 and Cisco C8231-E-G2	Cisco C8235-G2	Cisco C8231-G2
Power supply (upgrade options)	150 W AC for PoE (external adapter) PoE budget – 120 W Secondary PSU option – external adapter 150 W AC-DC 150 W DC-DC	230 W AC for PoE (external adapter) PoE budget – 120 W	115 W AC for PoE (external adapter) PoE budget – 30 W
Typical Power Consumption	34.20W	27.11 W	26.70 W

Table 6. Throughput and Scale

	Cisco C8235-E-G2 and Cisco C8231-E-G2	Cisco C8235-G2	Cisco C8231-G2
Throughput			
Forwarding (512B)	19 Gbps	19 Gbps	19 Gbps
IPsec (512B)	5 Gbps	5 Gbps	5 Gbps
SD-WAN* (512B)	4 Gbps	4 Gbps	4 Gbps
Threat protection* (EMIX)	2.4 Gbps (C8235-E-G2) 1 Gbps (C8231-E-G2)	2.4 Gbps	1 Gbps
Scale			
IPv4/IPv6 routes	1.5M	1.5M	1.5M
IPsec tunnels	700	700	700
IPv4 ACLs	3000	3000	3000
IPv4 ACEs	15K	15K	15K
NAT Sessions	1.5M	1.5M	1.5M
VRFs	4000	4000	4000

*SD-WAN feature combination: IPsec + QoS + Deep Packet Inspection + Flexible NetFlow
*Threat Protection: 100% DIA-NAT + NGFW + IPS + URLF + AMP

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Table 7. Physical specifications

Description	Cisco C8235-E-G2 and Cisco C8231-E-G2	Cisco C8235-G2	Cisco C8231-G2
Dimensions (H x W x D)	1.73 in x 17.25 in x 11.81 in	1.65 in x 8.9 in x 12.7 in 2.835 in x 12 in x 17.56 in (with rackmount tray holding power supply)	1.14 in x 8.1 in x 12.23 in 2.835 in x 12 in x 17.56 in (with rackmount tray holding power supply)
Rack Units (RU)	1 RU	Desktop	Desktop
Chassis weight	8.36 lbs	7 lbs	5 lbs
Input voltage	AC: 85 to 264 VAC DC: -40 to 72V; 48V nominal	AC: 85 to 264 VAC	AC: 85 to 264 VAC
Operating temperature	0 to 40°C, up to 10,000 feet 0 to 45°C, up to 6000 feet For NEBS, -5 to 55°C, up to 6000 feet (additional 3rd fan tray required)	0 to 40°C, at sea level (0.5°C/1000 ft derating from 40°C)	0 to 45°C, at sea level (0.5°C/1000 ft derating from 45°C)
Storage temperature	-40 to 70°C	-40 to 70°C	-40 to 70°C
Relative humidity (noncondensing)	Operating: 5 to 85% Non-operating and Storage: 5 to 95%		

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Modules

Table 8. Modules

Product number	Description
WAN modules	
C-NIM-WAN-2X	2-port 1/10 Gbps SFP/SFP+ WAN Module, NIM with WAN MACsec
C-NIM-WAN-4S	4-port 1 Gbps SFP WAN Module, NIM with WAN MACsec
LAN modules	
C-NIM-4X	4-port 1/10 Gbps SFP/SFP+ switch NIM, LAN/WAN MACsec and optional L3
C-NIM-8T	8-port 100 Mbps/1 Gbps switch NIM, LAN/WAN MACsec and optional L3
C-NIM-8M	8-port 100 Mbps /1/2.5 Gbps switch NIM, UPOE+, LAN/WAN MACsec and optional L3
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
Cellular modules	

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P-5GS6-R16SA-GL*	5G Sub-6 GHz Pluggable – 5G SA Global
P-LTEA7-NA*	CAT7 LTE Advanced Pluggable - North America
P-LTEA7-EAL*	CAT7 LTE Advanced Pluggable - EMEA, APAC, and LATAM
P-LTEA7-JP*	CAT7 LTE Advanced Pluggable - Japan

*Only Cellular Modules are supported on C8235-G2, while C8231-G2 do not support any modules

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Software management

The minimum Cisco IOS XE release versions for the Cisco 8200 Series Secure Routers are listed below:

	Device OS	Cisco Catalyst SD-WAN Manager
Cisco 8200 Series Secure Routers	Starting IOS XE 17.18.1	Starting SD-WAN Release 20.18.1

Ordering information

For a detailed overview of the ordering process, please visit the **Cisco 8200 Series Secure Routers Ordering Guide.**

Warranty

Cisco 8200 Series Secure Routers come standard with a Cisco Limited 2-Year Return To Factory Hardware Warranty. For more information, refer to:
https://www.cisco.com/c/en/us/products/warranties/warr-2yr-ltd-hw.html

Sustainability profile

Cisco is embedding sustainability into the product lifecycle—from manufacturing to end of use. Designed with consideration for Cisco's Circular Design Principles, our products feature both individual and portfolio-wide

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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's environmental, social, and governance (ESG) initiatives and performance is available in the Cisco Purpose Reporting Hub.

Table 9. Sustainability references

Sustainability topic		Description
Power	Power management configuration	The power management chapter in the System Management Configuration Guide provides detailed information on power management features and configurations available for the Cisco 8200 Series Secure Routers. The features discussed include power-supply modes, 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 light emitting diodes (LEDs) will stay depowered, saving energy until a link event is triggered or manually enabled by Command Line Interface or Mode button.
Energy management	Energy management dashboard	The Energy Management dashboard on the Catalyst SD-WAN Manager offers comprehensive energy management capabilities, allowing users to monitor energy usage, energy mix, costs, and greenhouse gas emissions in real time Energy Management
	Environmental monitoring configuration	The environmental monitoring chapter in the System Management Configuration Guide provides guidelines for configuring monitoring of environmental conditions of chassis components.

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Sustainability topic		Description
Materials, modularity, and reuse	Hardware standardization and modularity	Cisco 8200 Series Secure Routers use standard subassemblies and common components across products to streamline production and enhance repairability and upgradability.
	Simplified architecture	Cisco 8200 Series Secure Routers 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.
	Powder-coat finish	Cisco 8200 Series Secure Routers use a powder-coating finish instead of oil-based wet paint. In comparison, a powder-coating finish reduces the amount of harmful solvents used and volatile organic compounds (VOCs) emitted during the painting process.
	Bezel-free design	Cisco 8200 Series Secure Routers use a bezel-free design reducing plastic usage.
	Cisco Takeback and Reuse	This program allows customers to return used equipment for responsible recycling and reuse. Takeback and Reuse Program
	Cisco Refresh	This program offers certified remanufactured products, providing cost-effective alternatives to new equipment. Cisco Refresh
	Foam reduction	Cisco 8200 Series Secure Routers are packaged with corrugated and fiber flute materials, containing a minimum of 25% post-consumer recycled content. Circular economy and packaging sustainability
	Accessory opt-in	Accessory opt-in allows customers to select whether to include the accessory kit. Not including the kit results in using fewer materials and reducing waste. The default is now to not include the kit unless it is required.

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Sustainability topic		Description
Regulatory compliance	Environmental compliance	Information regarding Cisco compliance with applicable environmental laws and regulations is available at the Environmental Compliance section of the Cisco Purpose Reporting Hub. Environmental compliance
	Product Approvals Status (PAS)	Information regarding the certification status for given Cisco products in certain countries is available at the Cisco self-service PAS database. PAS database
	Product-related materials compliance	This page addresses Cisco's position regarding relevant product-related materials legislation, such as Restriction of Hazardous Substances (RoHS); Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH). RoHS and REACH
	Waste Electrical and Electronic Equipment (WEEE), battery, and packaging compliance	This page discusses Cisco's position regarding relevant product-related legislation on recycling, battery, and packaging. WEEE, battery and packaging
	Cisco packaging materials and codes	This table provides packaging material identification for packaging used for Cisco products. Packaging materials and codes

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Sustainability topic		Description
General	Sustainability inquiries	For ESG or CSR inquiries, please contact your Cisco account team.
	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

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Appendix

Safety and compliance

Chassis

The section below lists the safety and compliance information for the Cisco 8200 Series Secure Routers chassis.

Safety and certifications	EMC and EMI compliance
• UL 60950-1 • CAN/CSA-C22.2 No. 60950-1 • UL 62368-1 • CAN/CSA-C22.2 No. 62368-1 • EN 60950-1 • IEC 60950-1 • IEC 62368-1 • EN 62368-1 • AS/NZS 60950.1 • AS/NZS 62368.1 • IEC/EN 60825 Laser Safety • FDA: Code of Federal Regulations Laser Safety	• 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 • KS32 Class A • IEC/EN 61000-3-2: Power Line Harmonics • IEC/EN 61000-3-3: Voltage Fluctuations and Flicker • 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 • KS C 9835 • 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

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Document History

New or revised topic	Described in	Date
Document created	Datasheet	June 10, 2025
Added new modular variant	Across Document	Nov 10, 2025
Added Scale Numbers and Removed unsupported Modules	Table #6 and Table #8	Dec 5, 2025

Next steps

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
Bias-free language	The documentation set for this product strives to use bias-free language. For the purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product. Learn more about how Cisco is using inclusive language.

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