

Cisco 8100 Series Secure Routers

A Part of the Cisco 8000 Series Secure Router Family.

Contents

Overview	2
Models and specifications	4
Software management	10
Offers	11
Ordering information	11
Warranty	11
Sustainability profile	11
Appendix	16



Overview

Cisco 8100 Series Secure Routers deliver secure networking simplified. Powered by the all-new secure networking processor, a Cisco-customized unified system-on-a-chip (SoC) that processes security and routing tasks and the unified Cisco secure networking platform, the Cisco 8100 Series Secure Routers deliver robust, platform-level security, advanced performance engineering via 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

Purpose-built for small branch environments, Cisco 8100 Series Secure Routers deliver enterprise-grade security and high performance in a compact, energy-efficient form factor. With integrated next-generation firewall, Zero Trust capabilities, and SASE-ready architecture, the 8100 Series empowers small sites to operate securely and reliably—simplifying management while scaling with your business needs.

Industries

- Retail (pop-up shops, kiosks, small storefronts)
- Banking (ATM sites, remote kiosks)
- Hospitality (boutique hotels, coffee shops)
- Healthcare (small clinics, mobile health units)

Sites

- Small brick-and-mortar stores or pop-up locations
- Remote offices or temporary project sites
- Standalone ATMs or service/ticketing kiosks
- Small healthcare outposts



Use Cases

- Secure routing or SD-WAN for point-of-sale transactions
- Reliable and secure connectivity for small branch workers, remote workers, and IoT
- Prioritize application traffic based on centralized policies Data Protection with encryption designed to remain unbreakable—even in the era of quantum computing
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- Remote asset management and monitoring
- · Quick deployment of secure networking for temporary or mobile operations

Key features

Hardware accelerated security and networking	 Fast cryptography and deep packet inspection Hardware acceleration ensures high throughput with robust threat protection
Fanless model for small branches	 Quiet, reliable fanless SKU ideal for noise-sensitive or space-constrained sites Reduced moving parts for lower maintenance and enhanced durability
Secure connectivity for small branches	 Combines NGFW security, routing, and SD-WAN in one unified platform Optimize performance with cloud security services like Cisco SSE or third-party options, enabling robust protection and a leaner branch Simplifies branch infrastructure and management with all-in-one secure access
Secure networking with PQC readiness	Future-proofs campus security with advanced, quantum-resistant encryption



Models and specifications

Cisco 8100 Series Secure Routers are 1 RU fixed form factor devices with four models: Cisco 8130-G2, 8140-G2, 8151-G2, and 8161-G2.

Cisco 8130-G2 provides 5x GE RJ-45 and 1x GE RJ-45/SFP combo. While Cisco 8140-G2, 8150-G2,8161-G2 provides 8x GE RJ-45 and 2x GE RJ-45/SFP combo.



Table 1. Front View of a Cisco C8130-G2 Secure Router

Label	Description
1	Status LED, blue beacon LED
2	Reset button
3	12 VDC power input
4	GE RJ-45 ports
5	GE RJ-45/SFP combo
6	1 x RJ-45 console port
7	USB Type-C 3.0
8	Kensington lock, ground screw





Table 2. Front View of a Cisco C8140-G2 Secure Router

Label	Description
1	Status LED, blue beacon LED
2	Reset button
3	12 VDC power input
4	GE RJ-45 ports
5	GE RJ-45/SFP combo
6	RJ-45 console port
7	USB Type-C 3.0
8	Kensington lock, ground screw





Table 3. Front View of a Cisco C8151-G2 Secure Router

Label	Description
1	Status LED, blue beacon LED
2	Reset button
3	12 VDC power input
4	8 x GE RJ-45 ports
5	GE RJ-45/SFP combo
6	RJ-45 console port
7	USB Type-C 3.0
8	Optional PIM Slot - CAT 7 LTE or 5G
9	Kensington lock, ground screw





Table 4. Front View of a Cisco C8161-G2 Secure Router

Label	Description
1	Status LED, blue beacon LED, PoE LED
2	Reset button
3	12 VDC power input
4	GE RJ-45 ports
5	GE RJ-45/SFP combo
6	RJ-45 console port
7	USB Type-C 3.0
8	Optional PIM Slot - CAT 7 LTE or 5G
9	Kensington lock, ground screw



Table 5. Technical specifications

	C8130-G2	C8140-G2	C8151-G2	C8161-G2
Interfaces and slots				
WAN ports	1x 1GE RJ-45, 1x 1GE RJ-45/SFP Combo	2x 1GE RJ- 45/SFP combo	2x 1GE RJ- 45/SFP combo	2x 1GE RJ- 45/SFP combo
Flex ports	2 x GE RJ-45	2 x GE RJ-45	2 x GE RJ-45	2 x GE RJ-45
LAN ports	2x 1GE RJ-45	6x 1GE RJ-45	6x 1GE RJ-45	6 x GE RJ-45 (4PoE/2PoE+) PoE output max power 80W
Cellular slot	- Optional Pluggable Module - CAT 7 or 5G			
Management port	1 x RJ-45 console			
Memory and storage				
DRAM	4GB RAM	4GB RAM	8GB RAM	8GB RAM
Flash	16 GB			
Storage	1 x USB Type C 3.0 storage			
External power supply	33W/66W	66W	66W	150W
Throughput				
Forwarding (512B)	1.9 Gbps	5.6 Gbps	5.6 Gbps	5.6 Gbps
IPsec (512B)	1.5 Gbps	1.5 Gbps	1.5 Gbps	1.5 Gbps



	C8130-G2	C8140-G2	C8151-G2	C8161-G2
SD-WAN* (512B)	-	-	900 Mbps	900 Mbps
Threat protection (EMIX)**	-	-	1 Gbps	1 Gbps

^{*}SD-WAN feature combination: IPsec + QoS + Deep Packet Inspection + Flexible NetFlow

Table 6. Physical specifications

Description	C8130-G2	C8140-G2	C8151-G2	C8161-G2
Dimensions (H x W x D)	7.8 in x 10.8 in x 1.09 in	6.9 in x 12.7 in x 1.09 in	8.5 in x 12.7 in x 1.57 in	7.8 in x 10.8 in x 1.09 in
MTBF		>100,000 h	nours	
Rack Units (RU)	1RU			
Chassis weight	3.5 lb	3.57 lb	5.1 lb	3.5 lb
Temperature	Operating Temperature: 0° to 40°C at sea level, 1°C/1000 ft derating from 40°C Non-Operating Temperature: -40° to +70°C (-40° to +158°F)			
Humidity	Operating Conditions Humidity: 5% to 85% relative humidity (noncondensing) Non-Operating Conditions Humidity: -40° to +70°C (-40° to +158°F)			
Altitude	Operating Altitude: 0 to 10,000 ft (0 to 3048 m) Non-Operating Altitude: 0 to 15,000 ft (0 to 4572 m)			

^{**} Threat protection feature combination: 100% DIA-NAT + ZBFW + IPS + URLF + AMP



Modules

Table 7. Modules

Product number	Description
Fixed Wireless Access*	
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

^{*} Supported only on C8151-G2 and C8161-G2

Software management

	Device OS	Cisco Catalyst SD-WAN Manager*
Cisco 8100 Series Secure Routers	Starting IOS XE 17.18.1	Starting SD-WAN Release 20.18.1

 $[\]mbox{*}$ Supported only on C8151-G2 and C8161-G2



Offers

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

Ordering information

For a detailed overview of the ordering process, please visit the **Cisco 8000 Series Secure Routers Ordering Guide.**

- Contact sales >
- Find a partner >
- Create an estimate >

Warranty

Cisco 8100 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 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 Cisco's Purpose Reporting Hub.



Table 8. Sustainability references

Sustainability topi	С	Description
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.
Materials, modularity, and reuse	Hardware standardization and modularity	Cisco 8100 Series Secure Routers use standard subassemblies and common components across products to streamline production and enhance repairability and upgradability.
	Simplified architecture	Cisco 8100 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 8100 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 8100 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



Sustainability topic		Description
	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.
Regulatory compliance	Environmental compliance	Information regarding Cisco compliance with applicable environmental laws and regulations is available at the Environmental Compliance section of Cisco's Purpose Reporting Hub. Environmental compliance
	Product Approvals Status (PAS)	Information regarding the certification status for given Cisco products in certain countries is available at Cisco's 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



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's Environmental Sustainability policies, positions, and guides are provided in the "Policies, positions, and guides" section of Cisco's 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



Appendix

Safety and compliance

Chassis

The section below lists the safety and compliance information for the Cisco 8100 Series Secure Routers chassis.

Safety and certifications	EMC and EMI compliance
 UL 60950-1 CSA 60950-1 UL 62368-1 CSA 62368-1 EN 62368-1 IEC 62368-1 	 EN 55032 47 CFR Part 15 ICES-003 VCCI-CISPR 32 AS/NZS CISPR 32 CNS 15936 EN 300 386 EN 55035 EN 61000-3-2 EN 61000-3-3 EN 61000-4-2 EN 61000-4-5 EN 61000-4-6 EN 61000-4-11 EN 61000-6-1



Document History

New or revised topic	Described in	Date
Document created	Datasheet	June 10, 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

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