Cisco Catalyst 9300 Series

The Next Generation of the Industry's Most Widely Deployed Stackable Switching Platform

The **Cisco Catalyst 9300 Series** switches are the next generation of enterprise-class stackable access-layer switches that are part of the Catalyst 9000 switching family. These switches support full PoE+, Cisco UPOE, and field-replaceable redundant fans and power supplies.

In addition, Cisco Catalyst 9300 Series models also support a variety of fixed and modular uplink options for both copper and fiber uplink support as well as dense 1GE fiber connectivity for FTTX and 1GE aggregation.

Highlights

- x86 CPU complex with 8 GB memory, 16 GB of flash, and external USB 3.0 SSD pluggable storage slot (delivering 120 GB of storage with an option SSD drive) to host containers
- 1GE copper, fiber, or 1/2.5/5/10GE (mGig) ports
- Fixed uplinks (Catalyst 9300L) with 4 × 1GE SFP, 4 × 10GE SFP+, or 2 × 40GE QSFP+ NEW
- Optional uplink modules (Catalyst 9300) with 4 × 1GE SFP, 4 × Multigigabit, 8 × 10GE SFP+, 2 × 25GE SFP28, or 2 × 40GE QSFP+
- Leading PoE capabilities with up to 384 ports of PoE per stack, full PoE+, and 60W Cisco UPOE
- Resiliency with field-replaceable redundant power supplies and fans
- Operational efficiency with optional backplane stacking, supporting stacking bandwidth up to 320 Gbps with Cisco StackWise-320 (Catalyst 9300L) or up to 480 Gbps with Cisco StackWise-480 (Catalyst 9300)
- Cisco IOS XE: 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
- Advanced security:
  - Encrypted Traffic Analytics (ETA): You benefit from the power of machine learning to identify and take actions toward threats or anomalies in your network, including malware detection in encrypted traffic (without decryption) and distributed anomaly detection
  - Enhanced security with AES-256 MACsec encryption, policy-based segmentation, and trustworthy systems
- Line-rate, hardware-based Flexible NetFlow, delivering flow collection of up to 64,000 flows
- Cisco Software-Defined Access (SD-Access):
  - Simplified operations and deployment with policy-based automation from edge to cloud managed with Cisco Identity Services Engine (ISE)
  - Network assurance and improved resolution time through Cisco DNA Center
- Plug and Play (PnP) enabled: A simple, secure, unified, and integrated offering to ease new branch or campus device rollouts or updates to an existing network
- Cisco UADP 2.0 ASIC with programmable pipeline and micro-engine capabilities, along with template-based, configurable allocation of Layer 2 and Layer 3 forwarding, Access Control Lists (ACLs), and Quality of Service (QoS) entries

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Cisco Catalyst 9300 Series

Cisco Catalyst 9300 Series (Fixed Uplink Models) NEW

Product SKU	Service SKU SNTC 8×5×NBD	Software Package	Downlinks					Uplinks				PoE				Power Supply		Stack-Wise	Rack Mount
			1GE RJ45	mGig RJ45			1GE SFP	1GE SFP	10GE SFP+	40GE QSFP+	Network Module Slot	Ports	UPOE	Power Budget		Slots	Default		
				2.5GE	5GE	10GE								Default	Max				
C9300L-24T-4G-E	CON-SNT-C930024G	Essentials	24					4								2	1 × 350 W AC	320	1 RU
C9300L-24T-4G-A	CON-SNT-C9300LA2	Advantage	24					4								2	1 × 350 W AC	320	1 RU
C9300L-24P-4G-E	CON-SNT-C9300L2E	Essentials	24					4				24		505 W	720 W	2	1 × 715 W AC	320	1 RU
C9300L-24P-4G-A	CON-SNT-C93004G4P	Advantage	24					4				24		505 W	720 W	2	1 × 715 W AC	320	1 RU
C9300L-24T-4X-E	CON-SNT-C92TXEL0	Essentials	24						4							2	1 × 350 W AC	320	1 RU
C9300L-24T-4X-A	CON-SNT-C00L2XAL	Advantage	24						4							2	1 × 350 W AC	320	1 RU
C9300L-24P-4X-E	CON-SNT-C9300L2X	Essentials	24						4			24		505 W	720 W	2	1 × 715 W AC	320	1 RU
C9300L-24P-4X-A	CON-SNT-C93024PX	Advantage	24						4			24		505 W	720 W	2	1 × 715 W AC	320	1 RU
C9300L-24UXG-4X-E	CON-SNT-C9300LGX	Essentials	16			8			4			24	✓	880 W	1,440 W	2	1 × 1,100 W AC	320	1 RU
C9300L-24UXG-4X-A	CON-SNT-C93024GA	Advantage	16			8			4			24	✓	880 W	1,440 W	2	1 × 1,100 W AC	320	1 RU
C9300L-24UXG-2Q-E	CON-SNT-C9300L2Q	Essentials	16			8				2		24	✓	722 W	1,440 W	2	1 × 1,100 W AC	320	1 RU
C9300L-24UXG-2Q-A	CON-SNT-C932QA4A	Advantage	16			8				2		24	✓	722 W	1,440 W	2	1 × 1,100 W AC	320	1 RU
C9300L-48T-4G-E	CON-SNT-CL4GET84	Essentials	48					4								2	1 × 350 W AC	320	1 RU
C9300L-48T-4G-A	CON-SNT-CAT9300L	Advantage	48					4								2	1 × 350 W AC	320	1 RU
C9300L-48P-4G-E	CON-SNT-C930G4EP	Essentials	48					4				48		505 W	1,440 W	2	1 × 715 W AC	320	1 RU
C9300L-48P-4G-A	CON-SNT-C9300AG4	Advantage	48					4				48		505 W	1,440 W	2	1 × 715 W AC	320	1 RU
C9300L-48PF-4G-E	CON-SNT-C93004FE	Essentials	48					4				48		890 W	1,440 W	2	1 × 1,100 W AC	320	1 RU
C9300L-48PF-4G-A	CON-SNT-C93004GA	Advantage	48					4				48		890 W	1,440 W	2	1 × 1,100 W AC	320	1 RU
C9300L-48T-4X-E	CON-SNT-C9300L4E	Essentials	48						4							2	1 × 350 W AC	320	1 RU
C9300L-48T-4X-A	CON-SNT-CX9300L4	Advantage	48						4							2	1 × 350 W AC	320	1 RU
C9300L-48P-4X-E	CON-SNT-C93004X4P	Essentials	48						4			48		505 W	1,440 W	2	1 × 715 W AC	320	1 RU
C9300L-48P-4X-A	CON-SNT-CA00LXL8	Advantage	48						4			48		505 W	1,440 W	2	1 × 715 W AC	320	1 RU
C9300L-48PF-4X-E	CON-SNT-C9300PFE	Essentials	48						4			48		890 W	1,440 W	2	1 × 1,100 W AC	320	1 RU
C9300L-48PF-4X-A	CON-SNT-C9300P4X	Advantage	48						4			48		890 W	1,440 W	2	1 × 1,100 W AC	320	1 RU
C9300L-48UXG-4X-E	CON-SNT-C9G430EX	Essentials	36			12			4			48	✓	675 W	1,775 W	2	1 × 1,100 W AC	320	1 RU
C9300L-48UXG-4X-A	CON-SNT-CA9300L4	Advantage	36			12			4			48	✓	675 W	1,775 W	2	1 × 1,100 W AC	320	1 RU
C9300L-48UXG-2Q-E	CON-SNT-CXG934QE	Essentials	36			12				2		48	✓	675 W	1,775 W	2	1 × 1,100 W AC	320	1 RU
C9300L-48UXG-2Q-A	CON-SNT-C9302QA4	Advantage	36			12				2		48	✓	675 W	1,775 W	2	1 × 1,100 W AC	320	1 RU

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Cisco Catalyst 9300 Series

Cisco Catalyst 9300 Series (Modular Uplink Models)

Product SKU	Service SKU SNTC 8×5×NBD	Software Package	Downlinks					Uplinks				PoE				Power Supply		Stack-Wise	Rack Mount
			1GE RJ45	mGig RJ45			1GE SFP	1GE SFP	10GE SFP+	40GE QSFP+	Network Module Slot	Ports	UPOE	Power Budget		Slots	Default		
				2.5GE	5GE	10GE								Default	Max				
C9300-24T-E	CON-SNT-C93002TE	Essentials	24								1					2	1 × 350 W AC	480	1 RU
C9300-24T-A	CON-SNT-C93002TA	Advantage	24								1					2	1 × 350 W AC	480	1 RU
C9300-24P-E	CON-SNT-C93002PA	Essentials	24								1	24		445 W	720 W	2	1 × 715 W AC	480	1 RU
C9300-24P-A	CON-SNT-C93002PE	Advantage	24								1	24		445 W	720 W	2	1 × 715 W AC	480	1 RU
C9300-24U-E	CON-SNT-C93002UE	Essentials	24								1	24	✓	830 W	1,440 W	2	1 × 1,100 W AC	480	1 RU
C9300-24U-A	CON-SNT-C93002UA	Advantage	24								1	24	✓	830 W	1,440 W	2	1 × 1,100 W AC	480	1 RU
C9300-24UX-E	CON-SNT-C930024U	Essentials				24					1	24	✓	560 W	1,440 W	2	1 × 1,100 W AC	480	1 RU
C9300-24UX-A	CON-SNT-C93024XU	Advantage				24					1	24	✓	560 W	1,440 W	2	1 × 1,100 W AC	480	1 RU
C9300-48T-E	CON-SNT-C930048E	Essentials	48								1					2	1 × 350 W AC	480	1 RU
C9300-48T-A	CON-SNT-C93004TA	Advantage	48								1					2	1 × 350 W AC	480	1 RU
C9300-48P-E	CON-SNT-C93004PE	Essentials	48								1	48		437 W	1,440 W	2	1 × 715 W AC	480	1 RU
C9300-48P-A	CON-SNT-C93004PA	Advantage	48								1	48		437 W	1,440 W	2	1 × 715 W AC	480	1 RU
C9300-48U-E	CON-SNT-C93004UE	Essentials	48								1	48	✓	822 W	1,800 W	2	1 × 1,100 W AC	480	1 RU
C9300-48U-A	CON-SNT-C93004UA	Advantage	48								1	48	✓	822 W	1,800 W	2	1 × 1,100 W AC	480	1 RU
C9300-48UXM-E	CON-SNT-C93E048X	Essentials		36		12					1	48	✓	490 W	1,590 W	2	1 × 1,100 W AC	480	1 RU
C9300-48UXM-A	CON-SNT-C93A048M	Advantage		36		12					1	48	✓	490 W	1,590 W	2	1 × 1,100 W AC	480	1 RU
C9300-48UN-E	CON-SNT-C93004UN	Essentials			48						1	48	✓	645 W	1,745 W	2	1 × 1,100 W AC	480	1 RU
C9300-48UN-A	CON-SNT-C930048N	Advantage			48						1	48	✓	645 W	1,745 W	2	1 × 1,100 W AC	480	1 RU
C9300-24S-E	CON-SNT-C930024E	Essentials					24				1					2	1 × 715 W AC	480	1 RU
C9300-24S-A	CON-SNT-C930024A	Advantage					24				1					2	1 × 715 W AC	480	1 RU
C9300-48S-E	CON-SNT-C930048S	Essentials					48				1					2	1 × 715 W AC	480	1 RU
C9300-48S-A	CON-SNT-C93004SA	Advantage					48				1					2	1 × 715 W AC	480	1 RU

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Cisco DNA Licenses for Cisco Catalyst 9300L Fixed Uplink Models

Software Package	Product SKU			Compatible Model
	3-Years	5-Years	7-Years	
Cisco DNA Essentials	C9300L-DNA-E-24-3Y	C9300L-DNA-E-24-5Y	C9300L-DNA-E-24-7Y	24-port Catalyst 9300L (Network Essentials)*1
	C9300L-DNA-E-48-3Y	C9300L-DNA-E-48-5Y	C9300L-DNA-E-48-7Y	48-port Catalyst 9300L (Network Essentials)*2
Cisco DNA Advantage	C9300L-DNA-A-24-3Y	C9300L-DNA-A-24-5Y	C9300L-DNA-A-24-7Y	24-port Catalyst 9300L (Network Advantage)*3
	C9300L-DNA-A-48-3Y	C9300L-DNA-A-48-5Y	C9300L-DNA-A-48-7Y	48-port Catalyst 9300L (Network Advantage)*4

*1 C9300L-DNA-E-24 is required in CCW. *2 C9300L-DNA-E-48 is required in CCW.
*3 C9300L-DNA-A-24 is required in CCW. *4 C9300L-DNA-A-48 is required in CCW.

Cisco DNA Licenses for Cisco Catalyst 9300 Modular Uplink Models

Software Package	Product SKU			Compatible Model
	3-Years	5-Years	7-Years	
Cisco DNA Essentials	C9300-DNA-E-24-3Y	C9300-DNA-E-24-5Y	C9300-DNA-E-24-7Y	24-port Catalyst 9300 (Network Essentials)*1
	C9300-DNA-E-48-3Y	C9300-DNA-E-48-5Y	C9300-DNA-E-48-7Y	48-port Catalyst 9300 (Network Essentials)*2
Cisco DNA Advantage	C9300-DNA-A-24-3Y	C9300-DNA-A-24-5Y	C9300-DNA-A-24-7Y	24-port Catalyst 9300 (Network Advantage)*3
	C9300-DNA-A-48-3Y	C9300-DNA-A-48-5Y	C9300-DNA-A-48-7Y	48-port Catalyst 9300 (Network Advantage)*4

*1 C9300-DNA-E-24 is required in CCW. *2 C9300-DNA-E-48 is required in CCW.
*3 C9300-DNA-A-24 is required in CCW. *4 C9300-DNA-A-48 is required in CCW.

Ordering and Licensing Guide

You must order a Cisco DNA License in order to purchase a switch.
A Cisco Smart Account is mandatory when ordering a Cisco DNA License.
The Cisco Smart Account is a new solution that provides a central location to manage Cisco software licenses across an entire organization, allowing partners and customers to optimize their software management.
To obtain a Cisco Smart Account, visit Cisco Software Central and select the [Request a Smart Account] option under the [Administration] heading.

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Cisco Catalyst 9300 Series

Network Modules for Cisco Catalyst 9300 Modular Uplink Models

Product SKU	Description	Compatible Model
C9300-NM-4G	4 × 1GE SFP Network Module	Catalyst 9300
C9300-NM-4M	4 × mGig Network Module	Catalyst 9300
C9300-NM-8X	8 × 10GE SFP+ Network Module	Catalyst 9300
C9300-NM-2Y	2 × 25GE SFP28 Network Module	Catalyst 9300
C9300-NM-2Q	2 × 40GE QSFP+ Network Module	Catalyst 9300

Power Supply Modules for Cisco Catalyst 9300 Series

Product SKU		Product SKU (80+ Platinum)		Product SKU (Upgrade)*1	Description	Compatible Model
Primary	Secondary	Primary	Secondary			
PWR-C1-350WAC	PWR-C1-350WAC/2	PWR-C1-350WAC-P	PWR-C1-350WAC-P/2		350 W AC Power Supply Module	Catalyst 9300L/9300
PWR-C1-715WAC	PWR-C1-715WAC/2	PWR-C1-715WAC-P	PWR-C1-715WAC-P/2	PWR-C1-715WAC-UP	715 W AC Power Supply Module	Catalyst 9300L/9300
PWR-C1-1100WAC	PWR-C1-1100WAC/2	PWR-C1-1100WAC-P	PWR-C1-1100WAC-P/2	PWR-C1-1100WAC-UP	1,100 W AC Power Supply Module	Catalyst 9300L/9300
PWR-C1-715WDC	PWR-C1-715WDC/2				715 W DC Power Supply Module	Catalyst 9300L/9300

*1 Options to upgrade the default AC power supply module.

Cisco StackWise-320 Kit & Cables for Cisco Catalyst 9300L Fixed Uplink Models

Product SKU	Description	Compatible Model
C9300L-STACK-KIT	StackWise-320 Kit*1	Catalyst 9300L
STACK-T3-1M	StackWise Cable (1 m)	Catalyst 9300L
STACK T3-3M	StackWise Cable (3 m)	Catalyst 9300L

*1 The kit consists of two adapters and a stacking cable (50 cm).

Cisco StackWise-480 Cables for Cisco Catalyst 9300 Modular Uplink Models

Product SKU	Description	Compatible Model
STACK-T1-50CM	StackWise Cable (50 cm)	Catalyst 9300
STACK-T1-1M	StackWise Cable (1 m)	Catalyst 9300
STACK-T1-3M	StackWise Cable (3 m)	Catalyst 9300

Cisco StackWise-320/480

The Cisco StackWise-320/480 provides stacking of up to eight Cisco Catalyst 9300 Series switches with the optional Cisco StackWise-320/480 Kits (Cables).
Mixed stacking is not supported. You cannot stack fixed uplink models (Catalyst 9300L) with modular uplink models (Catalyst 9300), or other Catalyst switches, e.g., Cisco Catalyst 3650 and 3850 Series.

Cisco StackWise-320/480 Scalability & Performance

Stack Member	Stack Bandwidth	Stack Limit
Catalyst 9300L Fixed Uplink Models with Same License Level	320 Gbps	8
Catalyst 9300 Modular Uplink Models with Same License Level	480 Gbps	8

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Cisco Catalyst 9300 Series

Benefits of Transitioning to Cisco Catalyst 9300 Series

Feature		Catalyst 3560-X/3750-X	Catalyst 3650	Catalyst 3850	Catalyst 9300	Benefit
Scale and Performance	Bandwidth per Stack	64 Gbps	160 Gbps	480 Gbps	320 Gbps 480 Gbps	Greater throughput.
	Uplinks	4 × 1GE 2 × 10 GE	4 × 1GE 2 × 10GE 4 × 10GE 8 × 10GE 2 × 40GE	4 × 1GE 2 × 10GE 4 × 10GE 8 × 10GE 2 × 40GE	4 × 1GE 4 × mGig 4 × 10GE 8 × 10GE 2 × 25GE 2 × 40GE	Greater uplink scale.
	Multigigabit Downlink		✓	✓	✓	Support speeds above 1G in traditional cabling environments.
Advanced Security	Native Flexible NetFlow		✓	✓	✓	
	TrustSec and SGT for Wired and Wireless	Wired only	✓	✓	✓	Orchestrate role-based access to corporate resources.
	Trustworthy Systems		✓	✓	✓	
	Native MACsec-256			✓*1	✓	Most secure link authentication and encryption.
	Encrypted Traffic Analytics (ETA)				✓	Detect malware hiding in encrypted traffic without decrypting it.
Simplicity and Automation	x86 CPU				✓	Faster CPU performance.
	IOS XE OS		✓	✓	✓	Single common network OS across routing, switching, wireless, and IoT.
	KVM and Container-based Hosting Environments				✓	App hosting in the network.
	Guest Shell			✓	✓	On-box Python scripting.
	Model-Driven Pogrammability			✓	✓	Standards-based programmable interfaces.
	Streaming Telemetry			✓	✓	Rich contextual insights.
	Fabric-in-a-box				✓	
	SD-Access Programmability			✓	✓	Enable SD-Access without needing separate devices for each fabric role.

*1 Except some models.

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Cisco Catalyst 9300 Series

Transition Map

Existing Model		New Model		
Catalyst 3650	Catalyst 3850	Catalyst 9300	Interface	
WS-C3650-24TS		C9300L-24T-4G NEW	24 × 1GE, 4 × 1GE SFP	
WS-C3650-24PS		C9300L-24P-4G NEW	24 × 1GE PoE+, 4 × 1GE SFP	
WS-C3650-24TD		C9300L-24T-4X NEW	24 × 1GE, 4 × 10GE SFP+	
WS-C3650-24PD WS-C3650-24PDM		C9300L-24P-4X NEW	24 × 1GE PoE+, 4 × 10GE SFP+	
WS-C3650-8X24PD WS-C3650-8X24UQ		C9300L-24UXG-4X NEW	16 × 1GE UPOE, 8 × mGig UPOE, 4 × 10GE SFP+	
		C9300L-24UXG-2Q NEW	16 × 1GE UPOE, 8 × mGig UPOE, 2 × 40GE QSFP+	
WS-C3650-48TS		C9300L-48T-4G NEW	48 × 1GE, 4 × 1GE SFP	
WS-C3650-48PS WS-C3650-48FS		C9300L-48P-4G NEW C9300L-48PF-4G NEW	48 × 1GE PoE+, 4 × 1GE SFP	
WS-C3650-48TD WS-C3650-48TQ		C9300L-48T-4X NEW	48 × 1GE, 4 × 10GE SFP+	
WS-C3650-48PD WS-C3650-48FD WS-C3650-48PQ WS-C3650-48FQM WS-C3650-48FQ		C9300L-48P-4X NEW C9300L-48PF-4X NEW	48 × 1GE PoE+, 4 × 10GE SFP+	
WS-C3650-12X48FD WS-C3650-12X48UQ WS-C3650-12X48UR		C9300L-48UXG-4X NEW	36 × 1GE UPOE, 12 × mGig UPOE, 4 × 10GE SFP+	
WS-C3650-12X48UZ		C9300L-48UXG-2Q NEW	36 × 1GE UPOE, 12 × mGig UPOE, 2 × 40GE QSFP+	
	WS-C3850-24T	C9300-24T	24 × 1GE	Network modules are supported: • 4 × 1GE SFP • 4 × mGig • 8 × 10GE SFP+ • 2 × 25GE SFP28 • 2 × 40GE QSFP+
	WS-C3850-24P	C9300-24P	24 × 1GE PoE+	
	WS-C3850-24U	C9300-24U	24 × 1GE UPOE	
	WS-C3850-24XU	C9300-24UX	24 × mGig UPOE	
	WS-C3850-48T	C9300-48T	48 × 1GE	
	WS-C3850-48P WS-C3850-48F	C9300-48P	48 × 1GE PoE+	
	WS-C3850-48U	C9300-48U	48 × 1GE UPOE	
	WS-C3850-12X48U	C9300-48UXM	36 × mGig (1/2.5GE) UPOE, 12 × mGig UPOE	
		C9300-48UN	48 × mGig (1/2.5/5GE) UPOE	
	WS-C3850-12S	C9300-24S	24 × 1GE SFP	
	WS-C3850-24S	C9300-48S	48 × 1GE SFP	

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