

Comparison

Cisco 9350 Series

Technical Marketing Engineering
Enterprise Networking

Layer23-Switch.com



Cisco C9350 vs Catalyst 3K

Hardware Comparison

	C9350	C9300X	C9300	C9300L	C3850	Outcome
CPU	2.4-GHz 4C Intel RPL	2.4-GHz 4C Intel HWL	1.8-GHz 4C Intel BDW	2.2-GHz 4C Intel BDW	800-MHz 4C Intel x86	Newer, Faster CPU
Memory (DRAM)	16GB DDR5	16GB DDR4	8GB DDR4	8GB DDR4	4GB DDR3	>2-4X memory
ASIC	A100	UADP2.0sec	UADP2.0	UADP2.0	UADP1.1	Unified ASICs
Performance	~1.5 Bpps	~1.0 Bpps	~350 Mpps	~250 Mpps	~250 Mpps	>4-8x Throughput
Capacity	~1.3 Tbps	~480 Gbps	~240 Gbps	~240 Gbps	~120 Gbps	>4-8x Bandwidth
PSU Redundancy	3	2	2	2	2	More Power, N+1
Stacking	StackWise-1.6T	StackWise-1T	StackWise-480	StackWise-320	StackWise-480	>2-5X Stacking BW
1G max	448 - 672*	448	448	416	468	>1.5X Density
10G max	448 - 672*	448	448	128	432	>1.5X Density
25G max	64 - 96*	64	16	32	--	25G + 4X Density
50G max	32 - 48*	--	--	--	--	50G + Density
40G max	32 - 48*	32	16	16	18	>4X Density
100G max	32 - 48*	32	--	--	--	100G + 1.5X Density

*12 Member stack

NOTICE: All scale numbers assume the 'Default' ASIC template

Cisco C9350 vs Catalyst 3K

Baseline Features & Scale

	C9350		C9300X		C9300		C9300L		C3850		Outcome
IP LPM Routes	256K/128K		15k/7.5K		8K/4K		8K/4K		8K/4K		
IP Host Routes	96K/48K		32K/16K		32K/16K		32K/16K		32K/16K		
MAC Address	64K		32K		32K		32K		32K		
Multicast L2 groups	8K		8K		8K		8K		4K		
Multicast L3 routes	8K/4K		8K/4K		8K/4K		8K/4K		4K/2K		
MPLS VPN Labels			15K		7K		7K		7K		
NAT/PAT	13K		5K		5K		5K				
PBR	3K		3K		3K		3K				
SGT/OG ACL Labels	12K		5K		5K		5K		3K		
Security ACL Entries	16K	16K	2.5K	2.5K	2.5K	2.5K	2.5K	2.5K	1.5K	1.5K	
QoS ACL Entries											
NetFlow Entries	32K	32K	32K	32K	32K	32K	32K	32K	24K	24K	
Policers	4K		4K		4K		4K		1K		
PVST Instances	1K		300		300		300		128		
VLANs	4K		1K		1K		1K		1K		
VRFs/VPNs	256		256		256		256		64		

NOTICE: All scale numbers assume the 'Default' ASIC template

Catalyst 9350 vs Catalyst 3K

Advanced Features & Scale

	C9350	C9300X	C9300	C9300L	C3850	Outcome
App Hosting	2 x 10G (4 vCPU, 16GB RAM)	2 x 10G (4 vCPU, 16GB RAM)	1 x 1G (2 vCPU, 8GB RAM)	1 x 1G (2 vCPU, 8GB RAM)	No	>2-4X App Hosting
Custom Templates (SDM)	Yes	No	No	No	No	Customize Tables
Encryption	MACsec 256 + IPsec	MACsec 256 + IPsec	MACsec 256	MACsec 256	MACsec 128	HW Crypto
AVC/NBAR	Yes	Yes	Yes	Yes	Yes	App Visibility
ETA/XDR	Yes	Yes	Yes	Yes	No	Sec Visibility
PTP	PTP/AVB & Sync-E	PTP/AVB	PTP/AVB	PTP/AVB	PTP/AVB	Precision Time

NOTICE: All scale numbers assume the 'Default' ASIC template

Competitive Comparisons



Cisco C9350 Series Smart Switch – Infra

	C9350	vs. C9300X	vs. C9300	Juniper EX4400	HP/Aruba CX6300M	Arista CCS 720XP	Outcome	
Day-0 Cloud Mgmt.	Yes	-M Only	-M Only	Yes	Yes	Yes	=CurrentGen-M; =Comp	
Back Stacking	12 member*	8 member (2x)	8 member (2x)	No	No	No	2xCurrentGen	1.5X – 2X Stacking
Stacking B/W	1.6T	1T (1.6x)	480G (3.5x)	400G	200G	50G	1.6xCurrentGen; 4xComp	
Front Panel Stacking	Yes (12m)**	No	No	Yes (10m)	Yes (10m)	Yes (12m)	1.6xComp	
IPv4 Routes	64k-256K**	8k	8k	130k	8k	16k	32xCurrentGen; ~1.9xComp; √Scale Flexibility	30X IPv4 Routes
MAC Address	64K-128K**	32K	32k	112k	32k	64k	4xCurrentGen; >Comp; √Scale Flexibility	4X MAC, IPv4 Hosts, Netflow
IPv4 Hosts	96K-128K**	32k	32k	81K	32k	64k	4xCurrentGen; ~1.5xComp; √Scale Flexibility	
Flexible Netflow	64K-128K**	32k	32k	No (sflow, HFT)	No (sflow, IPFIX)	No (sflow, IPFIX)	4xCurrentGen; √Scale Flexibility	
Security ACL	36K-136K**	8k	5k	7k	7k	10k	17xCurrentGen; 13.6xComp; √Scale Flexibility	>15X Security ACL, NAT
IPv4 NAT	32K-128K**	5k	5k	No	No	No	~25xCurrentGen; √Scale Flexibility	
Custom ASIC Templates	Yes**	No	No	No	No	No	√NexGen only	Cisco Differentiator
App Hosting	2C-6C, 16-32GB, 2x10G	2C, 16GB, 2x10G	2C, 8GB, 2x1G	No	20% CPU 2GB mem 4GB storage	Yes No automation & resource protection	CPU Core: 3xCurrentGen; >>Comp; √Scale Flexibility Mem: 2xCurrentGen; 16xComp; √Scale Flexibility	2X App Hosting
Power over Ethernet	4320W @90W	2880W (1.5x)	2880W (1.5x)	3600W	2880W	3644W	1.5xCurrentGen; ~1.19xComp	1.5X Power over Ethernet
POE w/ PSU Redundancy	2520W	1440W	1440W	1800W	1440W	1822W	1.75xCurrentGen; ~1.38xComp New 3 PSU (N+1). Highest density 90w PoE	
Time Sensitive Networking	PTP, AVB, Sync-E (5G)**	PTP, AVB	PTP, AVB	PTP – Transparent clock	PTP, AVB	PTP, AVB	=CurrentGen; =Comp √Sync-E (5G)	Most advanced TSN

Cisco C9350 Series Smart Switch – Security

	C9350	C9300X	C9300	Juniper	HP/Aruba	Arista	Outcome
256-bit AES-GCM	Yes	Yes	Yes				
IPsec	100G/ASIC*	100G/ASIC (200G)	No (via App Hosting SW)				
MACsec	Yes*	Yes	Yes	Yes	Yes	Supported on 722XP model	
WAN MACsec	Yes*	No	No		Yes		
ASAc Firewall	Yes*	Yes	Yes				
AI Endpoint Analytics	Yes	Yes	Yes		Client Insights		
AI Trust Analytics	Yes	Yes	Yes				
Encrypted Traffic Analytics	Yes*	Yes	Yes			Sensor only on certain models	
AI Root Cause Analysis & Guided Remediation	Yes	Yes	Yes	Limited	Limited	Not available for campus switching	

* Planned for FCS+

Cisco C9350 Series Smart Switch – Sustainability

	C9350	C9300X	C9300	Juniper	HP	Arista	Out	
Power supplies	3 x PSU (2+1)	2 x PSU(1+1)	2 x PSU(1+1)	2 X	2 X	2 X	double redundancy than 2x PSU and more power design mix options	17% more Redundant
Max PoE power on 1 RU	4320W	2880W	2880W	3600W	2880W	3584 W	Highest density of PoE	~1.5x POE
90w PoE Port on 1 RU	48	36	32					
System Hibernation	Yes	No	No	No	No	No	Potential market differentiator	15-25% Savings
Smart Power	Yes	No	No	No	No	No	Switch as Energy manager	
Auto-off (PSU, SFP, LED)	Yes	Yes	Yes	No	No	No	Up to 10% savings on system power utilization	~5% Savings
Cold Standby HW (PSU)	Yes	No	No	No	No	No	Firmware based standby features	
Titanium Rated PSU	Yes	No	No	No	No	No	96% efficiency	5% more Efficient
DC PSU	850W	715W	715W	550 W	1050W	700W	Low voltage DC systems integration/microgrids	5-10% more Efficient
HVDC & FMP	Yes	No	No	No	No	No	DC microgrids and Smart Buildings	
Max Performance / System Power (Watt)	2060/280W	2000G/510W	640G/240W	1020G/290W	880G/283W	2240G/236W	~ 30% power reduction over 9300X	30% better Performance/Watt
Centralized Energy Management	Yes	Yes	Yes	No	No	No	Sustainability and smart buildings	Actionable Insights
Power Telemetry & API	Yes	Yes	Yes	No	Yes	No	Sustainability and smart buildings	
Sustainable Packaging (no paper manual, no foam)	Yes	Yes	Yes	No	No	No	Reduced carbon footprint and reusable packaging	Circular Design
Non-plastic Bezel	Yes	No	No	No	No	No	Reduced plastics	
Modular ASIC, PHY, CPU boards	Yes	No	No	No	No	No	Circular Design/reusable	
Enhanced Fan Algorithms	Yes	No	No	No	No	No	Power Efficient cooling	
	Yes	No	No	No	No	No	Possible power savings by operating port speeds	
	Yes	Yes	Yes	No	No	No	Meets upcoming Federal requirements for LNE	Cisco Dif

Cisco C9350 Competitive Differentiation

Sustainability

Sustainability Features	Cisco Advantage	Competition Offering
Sustainable Infrastructure	- IEEE 802.3az (Energy-efficient ethernet) - StackPower - Modular Chassis - Mix of AC/DC Power Supplies	Competitors lack in providing power pooling capability, flexible chassis for connecting higher number of endpoints and efficiency in wired products
Environmental Sensors	Wired IoT Gateway & Partner Ecosystem	No equivalent capability
Sustainability Visibility & Insights	- Advanced PoE Assurance Dashlets - Sustainability Dashboard - AI-based Network Heatmap	- Competitors only support static reports around dynamic power load distribution, operational and state - No dedicated sustainability dashboards, heatmaps for switches

Security

Security Features	Cisco Advantage	Competition Offering
Secure Infrastructure	Trustworthy Systems (Image Signing, HW anchored secure boot, Tam, HW authenticity check, SUDI for PnP, Runtime Defenses, etc.)	None of the competitors support full suite. Limited to Secure Boot/TPM in most platforms
Secure Endpoints	- Cisco Secure Cloud Analytics - Umbrella Connector	No equivalent capability
Auto-Profile and Secure Endpoint Analytics	AI Endpoint Analytics, Trust Analytics	No equivalent capability
Secure Access	Identity Based Segmentation, ASAc	- Microsegmentation at scale not supported. - No equivalent capability to distributed FW deployment
Secure Transport	LAN MACsec, WAN MACsec, HW IPsec	- Only LAN MACsec supported. - No equivalent capability to WAN MACsec & HW IPsec (WAN MACsec support few SKUs for a competitor)

Simplicity

Simplicity Use-Cases	Cisco Advantage	Competition Offering
Machine Reasoning Engine (Guided Remediation)	- Network automation engine that uses AI to automate complex network operation workflows. - Helps you perform complex root cause analysis, detect issues and vulnerabilities, and either manually or automatically perform corrective actions	Competitors support AI-based capabilities with limited use-cases around wired/switching assurance with issue identification with no automated remediation
AI-based Security Threat Detection & Remediation	AI Endpoint Analytics, Trust Analytics	No equivalent capability
Service Assurance	End-to-end visualization of the path from campus/branch to clouds/DC with Cisco ThousandEyes Network and Application Synthetics	No equivalent capability

Smart

Smart Use-Cases	Cisco Advantage	Competition Offering
Service Extensibility with Application Hosting	Application hosting solution on the Cisco Catalyst 9000 family of switches provide the intelligence required at the edge without a need of external compute/server hardware	None of the competitors have equivalent capability on campus switching platforms along with vendor signed applications
Programmability	- Atomic Config Replace - Yang Model Enhancements - OpenConfig Model Support - SNMP to Yang Mapping - Terraform Provider for IOS XE	Competitors with DC heritage support various programmability extensions in campus switching operating systems but can not match total system control and visibility for wired and wireless infrastructure



Buy Cisco Switches, Routers & Firewalls - Global B2B Supplier

[Request a Quote](#)

Web: www.layer23-switch.com

Email: sales@layer23-switch.com

Tel: +852 5416 0902

WhatsApp: +86 171 8118 9993



Scan to visit