

Cisco

C1-C4510RE-S8+96V+

Datasheet



Product Overview

- Cisco's Catalyst 4500E Series stands out for scalable, high-performance switching, built for enterprise networks requiring robust security and seamless mobility.
- Ideal for large organizations, educational campuses, and enterprise branch offices seeking reliable Layer 2-4 switching and automation.
- Features include 10 Gigabit Ethernet uplinks, PoE+ and UPOE support, and flexible chassis options enabling you to tailor deployments as needs grow.
- Advanced resiliency comes built in, with supervisor engine redundancy, dual redundant fans, and software-based failover to keep operations running.
- The platform offers unified management, simplified operations and straightforward upgrades, providing investment protection across deployment generations.
- Reliable, efficient, and scalable, the Catalyst 4500E platform empowers growing businesses or distributed environments to innovate securely and cost-effectively.

Product Highlights

- **Borderless Network Experience:** Delivers high-performance, secure user access with Layer 2-4 switching and mobility support in enterprise environments.
- **Enterprise-Class Uplinks:** Equipped with 10 Gigabit Ethernet uplinks, enabling flexible, high-speed backbone and aggregation connections.
- **Redundant & Resilient Design:** Supports 1+1 supervisor engine redundancy, redundant fans, and software fault tolerance to minimize downtime.
- **Future-Ready Power:** Offers robust PoE+ and UPOE capabilities, making it ideal for powering devices and ensuring network longevity.

Detailed Features



C1-C4510RE-S8+96V+

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Component	Specification
Enclosure Type	Rack-mountable 14U
Ports	96 x 10/100/1000 + 8 x 10 Gigabit SFP+



Intelligent Network Services

Extends enhanced control to the network edge with advanced QoS, predictable performance, security features, and integrated resiliency for enterprise-grade switching.

Scalable TCAM Architecture

Powered by high-capacity TCAM with up to 384,000 entries, enabling wire-speed operation and feature capacity independent of QoS and security provisioning.

Flexible Chassis & Supervisor Options

Offers four chassis with up to four supervisor engine choices, allowing up to 388 port scalability on a common modular platform for maximum network flexibility.

Continuous Service Availability

Redundant supervisor engines on R+E chassis provide subsecond failover and full ISSU, keeping mission-critical applications and real-time communications online without data loss.

Stateful Switchover Capabilities

Delivers nonstop forwarding and stateful switchover (NSF/SSO) to maintain session integrity during supervisor failover, ensuring smooth collaboration and VoIP.

Seamless Line Card Compatibility

Compatible with line cards for Cisco Catalyst 4000/4500 Series, investing in future growth without hardware replacement and securing long-term value.

Superior Management & Security

Comprehensive management options and integrated security protocols like SSH, RADIUS, and TACACS+ ensure easy control and solid protection against threats.

Cost-Effective Enterprise Scalability

Supports both enterprise headquarters and branch offices, balancing extensive feature sets and budget requirements for organizations scaling their networks affordably.

Technical Specifications

Product Specifications

Feature	Value
Device Type	Switch - 96 ports - managed - with Cisco Catalyst 4500E Supervisor Engine 8-E, 2x Cisco Line Cards (WS-X4748-RJ45V+E)
Enclosure Type	Rack-mountable 14U
Subtype	Gigabit Ethernet
Ports	96 x 10/100/1000 + 8 x 10 Gigabit SFP+
Power Over Ethernet (PoE)	PoE+
IPv4 Routing Performance	250 Mpps
IPv6 Routing Performance	125 Mpps
Switching Capacity	928 Gbps
Per-slot Switching Capacity	48 Gbps
IPv4 Routes Capacity	256000
IPv6 Routes Capacity	128000
QoS Hardware Entries	128000
Active VLANs	4096
Spanning Tree Protocol Instances	10000
Switched Virtual Interfaces (SVIs)	4094



Feature	Value
MAC Address Table Size	55K entries
Routing Protocol	PIM-SM, PIM-DM, PIM-SSM
Remote Management Protocol	RMON 1, RMON 2
Authentication Method	Secure Shell (SSH), RADIUS, TACACS+, Secure Shell v.2 (SSH2)
Features	Modular design, power over Ethernet (PoE), auto-negotiation, trunking, VLAN support, IPv6 support, Rapid Spanning Tree Protocol (RSTP) support, Multiple Spanning Tree Protocol (MSTP) support, Access Control List (ACL) support, Quality of Service (QoS), Jumbo Frames support, MLD snooping, Link Aggregation Control Protocol (LACP), Class of Service (CoS)
Compliant Standards	IEEE 802.3af, IEEE 802.3x, IEEE 802.1ae, IEEE 802.3at
Processor	2.2 GHz
RAM	4 GB SDRAM
Interfaces	1 x console RJ-45 management, 1 x management (Gigabit LAN) RJ-45, 96 x 1000Base-T RJ-45 PoE+, 1 x USB Type A, 8 x SFP+
Expansion Slots	10 (total) / 7 (free) x expansion slot, 1 (total) / 1 (free) x SD Memory Card
Installed Modules Qty (Max)	3 (installed) / 10 (max)
Power Device	Internal power supply - hot-plug
Installed Power Supplies	0 (installed) / 2 (max)
Power Redundancy	Optional
Power Redundancy Scheme	1+1 (with optional power supply)
Rack Mounting Kit	Included
Compliant Standards (Extended)	NEBS level 3, FCC Class A certified, CISPR 22 Class A, EN 60950, EN 61000-3-2, EN55022, VCCI Class A ITE, IEC 60950, EN 61000-3-3, EN55024, EN55022 Class A, UL 60950, EN50082-1, CSA 22.2 No. 60950, EN 61000-6-1, ACA TS001, AS/NZS 3260, FCC Part 68, AS/NZ 3548 Class A, JATE, ICES-003 Class A, CS-03, FCC CFR47 Part 15

Product Comparison



Feature	C1-C4510RE-S8+96V+	C1-N9KC93180FX-B24	C1-N9K-C93108TC-EX
Fixed Ports	96 x 10/100/1000 + 8 x 10G SFP+	48 x 10G SFP+	48 x 10GBASE-T + 6 x 40G QSFP+
Switching Capacity	928 Gbps	7.2 Tbps	2.16 Tbps
PoE/PoE+ Capability	PoE+ supported	Not available	Not available
Supervisor Engine Redundancy	Supported (1+1)	Not supported	Not supported
Modular Design	Yes, supports up to 10 expansion slots	Fixed configuration	Fixed configuration
Advanced Layer 2/3 Features	L2/L3, RSTP/MSTP, advanced ACL, QoS	L2/L3, VXLAN	L2/L3, VXLAN
Max MAC Address Table	55K entries	128K entries	128K entries
Remote Management	RMON, SSH, TACACS+	SNMP, CLI, REST	SNMP, CLI, REST
Stacking/Redundancy	Redundant fans and PS, modular	Redundant PS, fixed fans	Redundant PS, field replaceable fans
Application Scenario	Large enterprise campus/aggregation	Core/leaf, high density data center	Data center top-of-rack and aggregation

Accessories

Category	Accessories
Included Accessories	- Mounting Bracket - Console Cable - Power Supply Slot Filler
Optional Accessories	- SFP+ Transceiver Module - Redundant Power Supply - Supervisor Engine Upgrade



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References

[1] Cisco. (2023). Cisco Catalyst 4500 Series Switches Data Sheet. Retrieved from https://www.cisco.com/c/en/us/products/collateral/switches/catalyst-4500-series-switches/product_data_sheet0900aecd801792b1.html