

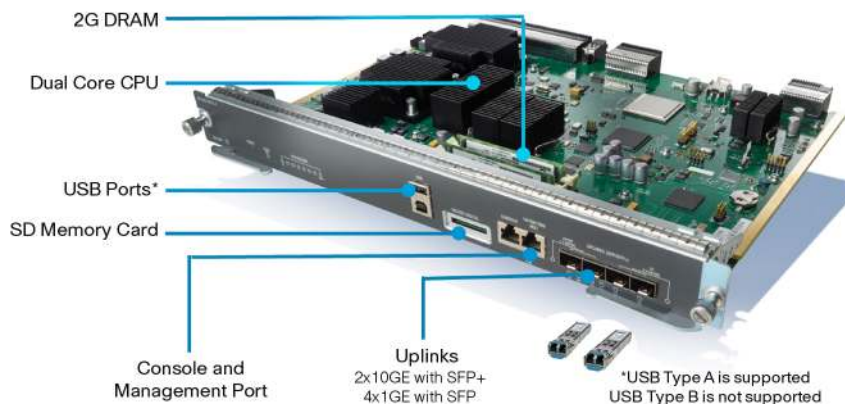
Cisco Catalyst 4500E Supervisor Engine 7L-E: Enhanced Borderless Campus Access and Aggregation Supervisor Engine

Cisco is announcing the Cisco[®] Catalyst[®] 4500E Supervisor Engine 7L-E (Figure 1), an enterprise-class borderless campus access and price/performance aggregation supervisor engine designed to provide 520Gbps per system with E-Series chassis. Cisco Catalyst 4500E Supervisor Engine 7L-E builds on the success of its predecessor Cisco Catalyst 4500E Supervisor Engine 6L-E and provides unprecedented performance with borderless services such as Flexible NetFlow and hosted third-party applications.

The Supervisor Engine 7L-E offers key innovations including:

- Up to 7 to 10 years of investment protection through backward and forward compatibility
- 520Gbps system performance with 48Gbps per slot to every line-card slot
- Future-proof investment with dual 10 Gigabit Ethernet uplinks (SFP+ optics) or four Gigabit Ethernet uplinks (SFP optics)
- Cisco Universal Power over Ethernet (UPOE) for unprecedented convergence to IP network infrastructure
- Application visibility through Flexible NetFlow (FNF)
- Cisco IOS[®] XE Software, which provides the ability to host third-party applications
- Energy efficiency with support of 802.3az Energy Efficient Ethernet (EEE)-capable line cards
- Industry-leading resiliency through In-Service Software Upgrade (ISSU)
- First and only modular switch with 8 bidirectional line-rate SPAN/RSPAN sessions

Figure 1. Cisco Catalyst 4500E Supervisor Engine 7L-E



Cisco Catalyst 4500E Supervisor Engine 7L-E Feature Highlights

The Cisco Catalyst 4500E Supervisor Engine 7L-E builds on the widely deployed line of Cisco Catalyst 4500 supervisor engines and enhances its predecessors to provide nonblocking 48 Gbps per slot bandwidth with Flexible NetFlow for optimized application visibility. In addition to this, the enterprise-class Cisco Catalyst 4500E Supervisor Engine 7L-E offers the following:

- Performance/scalability
 - 520Gbps switching capacity with 225 mpps of throughput
 - 2 nonblocking 10 Gigabit Ethernet uplinks (SFP+) or 4 nonblocking 1 Gigabit Ethernet uplinks (SFP)
 - Supports 3-, 6-, and 7-slot Cisco Catalyst 4500E chassis
 - Supports a maximum of 244 ports of 10/100/1000 in a 7-slot chassis
 - Supports up to 124 1GE nonblocking Fiber Ports or 62 10GE Fiber Ports in a 7-slot chassis
 - Enables next-generation Universal Power Over Ethernet (UPOE, WS-X4748-UPOE+E) in addition to backward compatible with other POE standards
 - Enables Energy Efficient Ethernet (IEEE 802.3az)
 - 128K Flexible NetFlow entries in hardware
 - External USB and SD card support for flexible storage options
 - 10/100/1000 RJ-45 console and management port
 - 64K/32K IPv4/IPv6 Routing Entries for campus access and aggregation deployments
 - IPv6 support in hardware, providing wire-rate forwarding for IPv6 networks and support for Dual Stack with innovative resource utilization
 - Dynamic hardware forwarding-table allocations for ease of IPv4-to-IPv6 migration
 - Scalable routing (IPv4, IPv6, and multicast) tables, Layer 2 tables, and ACL and QoS entries to make use of 8 queues per port and comprehensive security policies per port
- Infrastructure services
 - Cisco IOS XE Software, the modular open application platform for virtualized borderless services
 - Maximum resiliency with redundant components, Nonstop Forwarding/Stateful Switchover (NSF/SSO), and In-Service Software Upgrade (ISSU) support
 - Network virtualization through Multi-VRF technology for Layer 3 segmentation
 - Automation through Embedded Event Manager (EEM), Cisco Smart Call Home, AutoQoS, and Auto SmartPorts for fast provisioning, diagnosis, and reporting
- Borderless Network services
 - Optimized application performance through deep visibility with Flexible NetFlow supporting rich Layer 2/3/4 information (MAC, VLAN, TCP Flags) and synthetic traffic monitoring with IP SLA
 - Medianet capabilities to simplify video quality of service, monitoring, and security. In addition multicast features such as Protocol Independent Multicast (PIM) and Source-Specific Multicast (SSM) provide enterprise customers the additional scalability to support multimedia applications
 - Energy-efficient design with Cisco EnergyWise™ technology to manage network, PoEP, and PC
- Investment protection and reduced TCO

- Full backward compatibility with 6 G, 24 G, and 48 Gbps slot line cards with no performance degradation

Ordering Information

Table 1 provides ordering information.

Table 1. Ordering Information for Cisco Catalyst 4500E Supervisor Engine 7L-E

Product Number	Description
WS-X45-SUP7L-E	Cisco Catalyst 4500E Series Supervisor Engine, 520 Gbps
S45U-32-1502XO	Cisco Catalyst 4500 Supervisor Engine 7L-E Cisco IOS Software XE Release 3.2.0 XO noncrypto universal image
S45UK9-32-1502XO	Cisco Catalyst 4500 Supervisor Engine 7L-E Cisco IOS Software XE Release 3.2.0 XO crypto universal
C4500E-LB	LAN Base software license
C4500E-IPB	IP Base software license
C4500E-LIC=	Base product ID for paper delivered software upgrade licenses
C4500E-LB-IPB	LAN Base to IP Base upgrade license (paper delivery)
C4500E-LB-ES	LAN Base to Enterprise Services upgrade license (paper delivery)
C4500E-IP-ES	IP Base to Enterprise Services upgrade license (paper delivery)
C4500E-LIC-PAK	Base product ID for paper delivered software licenses for spare Supervisor Engine 7L-E
C4500E-IP-ES-S	IP Base to Enterprise Services upgrade license for spare Supervisor Engine 7L-E (paper delivery)
C4500E-IPB-S	IP Base software license for spare Supervisor Engine 7L-E (paper delivery)
L-C4500-LIC=	Base product ID for electronically delivered software upgrade licenses
L-C4500E-LB-IP	LAN Base to IP Base upgrade license (electronically delivered)
L-C4500E-IP-ES	IP Base to Enterprise Services upgrade license (electronically delivered)
L-C4500E-LB-ES	LAN Base to Enterprise Services upgrade license (electronically delivered)
SD-X45-2GB-E	Cisco Catalyst 4500 2GB SD Memory Card for Supervisor Engine 7L-E
USB-X45-4GB-E	Cisco Catalyst 4500 4GB USB device for Supervisor Engine 7L-E

For additional information, visit:

- **Cisco Catalyst 4500 Series homepage:** <http://www.cisco.com/go/4500>
- **Cisco Catalyst 4500 Series Supervisor Engine 7L-E data sheet:**
http://www.cisco.com/en/US/prod/collateral/switches/ps5718/ps4324/data_sheet_c78-686325.html
- **Cisco Catalyst 4500 Series Line Card data sheet:**
http://www.cisco.com/en/US/prod/collateral/modules/ps2710/ps5494/product_data_sheet0900aecd802109ea_ps4324_Products_Data_Sheet.html
- **Cisco Catalyst 4500 Series Chassis data sheet:**
http://www.cisco.com/en/US/prod/collateral/switches/ps5718/ps4324/product_data_sheet0900aecd801792b1.html

Cisco and Partner Services for Expanding the Borderless Network

Drive borderless network innovation, optimize operational efficiencies, establish business flexibility, and gain competitive advantage using intelligent, personalized services from Cisco and our partners. Through a discovery process that begins with understanding your business objectives, we help you integrate the next-generation Cisco Catalyst 4500-E Series Switches into your architecture and incorporate network services onto that platform. Sharing knowledge and leading practices, we support your success every step of the way as you deploy, absorb, manage, and scale new technology.

For additional information about Cisco services, visit <http://www.cisco.com/go/services>.

For More Information

For more information about the Cisco Catalyst 4500 Series, visit <http://www.cisco.com/go/4500>.

For additional information about Cisco products, contact:

- United States and Canada: (toll free) 800 553-NETS (6387)
- Europe: 32 2 778 4242



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