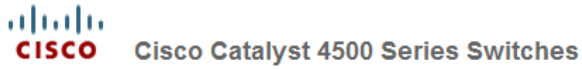


# Cisco Catalyst 4500 Series Switches



[Cisco Catalyst 4500-E Switch Models with CenterFlex Technology](#)

Cisco Catalyst 4500-E Switch Models with CenterFlex Technology				
Model	Catalyst 4510R-E Switch <a href="#">Product page</a> Data sheet	Catalyst 4507R-E Switch <a href="#">Product page</a> Data sheet	Catalyst 4506-E Switch <a href="#">Product page</a> Data sheet	Catalyst 4503-E Switch <a href="#">Product page</a> Data sheet
Total Slots	10	7	6	3
Supervisor Engine Slots Number	Slots 4 and 5	Slots 3 and 4	Slot 1	Slot 1
Line Card Slot Speed	24Gbps and 6Gbps	24Gbps and 6Gbps	24Gbps and 6Gbps	24Gbps and 6Gbps
Supervisor Engine Redundancy	Yes	Yes	No	No
Supervisor Engines Supported	Supervisor Engine V, V-10GE and 6-E	Supervisor Engine II-Plus, II-Plus-10GE , IV, V, V-10GE and 6-E	Supervisor Engine II-Plus, II-Plus-10GE , IV, V, V-10GE and 6-E	Supervisor Engine II-Plus-TS, II-Plus, II-Plus-10GE , IV, V, V-10GE and 6-E
Line Card Slots	8	5	5	2
Line Card Support	E-Series and classic <sup>1</sup>	E-Series and classic <sup>1</sup>	E-Series and classic <sup>1</sup>	E-Series and classic <sup>1</sup>
Power Supply Bays	2	2	2	2
AC Input	Yes	Yes	Yes	Yes
DC Input	Yes	Yes	Yes	Yes
Integrated Power over Ethernet (PoE)	Yes	Yes	Yes	Yes
Minimum Number of Power Supplies	1	1	1	1
Fan Tray Bays	1	1	1	1
Location of 19-inch Rack-Mount	Front	Front	Front	Front
Location of 23-inch Rack-Mount	Front (option)	Front (option)	Front (option)	Front (option)

<sup>1</sup>E-Series line cards require E-Series chassis.

Note: Supervisor engine slots do not support switching line-card modules. Line-card slots do not support supervisor engines.

[Cisco Catalyst 4500 Switch Models](#)

Cisco Catalyst 4500 Switch Models				
Model	Catalyst 4510R Switch <a href="#">Product page</a> <a href="#">Data sheet</a>	Catalyst 4507R Switch <a href="#">Product page</a> <a href="#">Data sheet</a>	Catalyst 4506 Switch <a href="#">Product page</a> <a href="#">Data sheet</a>	Catalyst 4503 Switch <a href="#">Product page</a> <a href="#">Data sheet</a>
Total Slots	10	7	6	3
Supervisor Engine Slots	2 <sup>2</sup>	2 <sup>2</sup>	1 <sup>1</sup>	1 <sup>1</sup>
Line Card Slot Speed	6Gbps	6Gbps	6Gbps	6Gbps
Supervisor Engine Redundancy	Yes (Supervisor Engine V,V-10GE, 6-E)	Yes (Supervisor Engine II-Plus, II-Plus-10GE , IV, V, V-10GE, 6-E)	No	No
Supervisor Engines Supported	Supervisor Engine V, V-10GE and 6-E	Supervisor Engine II-Plus, II-Plus-10GE , IV, V, V-10GE and 6-E	Supervisor Engine II-Plus, II-Plus-10GE , IV, V, V-10GE and 6-E	Supervisor Engine II-Plus, II-Plus-TS, II-Plus-10GE , IV, V, V-10GE and 6-E
Line Card Slots	8 <sup>2</sup>	5 <sup>2</sup>	5	2
Power Supply Bays	2	2	2	2
AC Input	Yes	Yes	Yes	Yes
DC Input	Yes	Yes	Yes	Yes
Integrated Power over Ethernet (PoE)	Yes	Yes	Yes	Yes
Minimum Number of Power Supplies	1	1	1	1
Fan Tray Bays	1	1	1	1
Location of 19-inch Rack-Mount	Front	Front	Front	Front
Location of 23-inch Rack-Mount	Front (option)	Front (option)	Front (option)	Front (option)

<sup>1</sup> Slot 1 is reserved for supervisor engine only; slots 2 and higher are reserved for line cards.  
<sup>2</sup> Chassis can be mounted in racks and cabinets that meet ANS/EIA-310-D and ETS 300 119-3.

**Note:** Supervisor engine slots do not support switching line card modules. Line card slots do not support supervisor engines.

Cisco Catalyst 4500 Layer 2/3/4 Supervisors		
Supervisor Engines	Designed For	Cisco Catalyst 4500 Chassis Supported
Supervisor 6-E <a href="#">Data Sheet</a>	<ul style="list-style-type: none"> <li>CenterFlex Technology</li> <li>Highest performance Layer 2/3/4 switching</li> <li>Enhanced Layer 2/3 services</li> <li>Highest route/QoS/security scalability</li> <li>IPv6 in hardware</li> <li>2 10 GbE or 4 GE uplinks (via TwinGig Module)</li> <li>Maximum investment protection</li> <li>High-density access layer</li> <li>Medium core/distribution</li> </ul>	All E-Series and Classic Chassis
Supervisor V-10GE <a href="#">Data Sheet</a>	<ul style="list-style-type: none"> <li>Highest performance Layer 2/3/4 switching</li> <li>Layer 2/3/4 services</li> <li>Future proofing with 2-10GbE and 4GE uplinks</li> <li>High-performance, high density access layer</li> <li>Medium core/Distribution</li> </ul>	All E-Series and Classic Chassis
Supervisor V <a href="#">Data Sheet</a>	<ul style="list-style-type: none"> <li>High-performance Layer 2/3/4 switching</li> <li>Layer 2/3/4 services</li> <li>GE uplinks</li> <li>High density Access layer</li> <li>Medium core/Distribution</li> </ul>	All E-Series and Classic Chassis
Supervisor IV <a href="#">Data Sheet</a>	<ul style="list-style-type: none"> <li>Entry-level Layer 2/3/4 switching &amp; services</li> <li>Layer 2/3/4 services</li> <li>GE uplinks</li> <li>Medium density Access layer</li> <li>Small core/distribution</li> </ul>	<ul style="list-style-type: none"> <li>4507R-E, 4507-R</li> <li>4508-E, 4508</li> <li>4503-E, 4503</li> </ul>

Cisco Catalyst 4500 Enhanced Layer 2-Plus Supervisors		
Supervisor Engines	Designed For	Cisco Catalyst 4500 Chassis Supported
<a href="#">Supervisor II-Plus-10GE Data Sheet</a>	<ul style="list-style-type: none"> <li>Highest performance Layer 2 switching With EIGRP stub</li> <li>Layer 2/3/4 services</li> <li>Future proofing with 2-10GbE and 4GE uplinks</li> <li>High-performance, Medium density access layer</li> </ul>	<ul style="list-style-type: none"> <li>4507R-E, 4507R</li> <li>4506-E, 4506</li> <li>4503-E, 4503</li> </ul>
<a href="#">Supervisor II-Plus Data Sheet</a>	<ul style="list-style-type: none"> <li>High-performance Layer 2 switching With EIGRP stub</li> <li>Layer 2/3/4 services</li> <li>GE uplinks</li> <li>Medium density Access layer</li> </ul>	<ul style="list-style-type: none"> <li>4507R-E, 4507R</li> <li>4506-E, 4506</li> <li>4503-E, 4503</li> </ul>
<a href="#">Supervisor II-Plus-TS Data Sheet</a>	<ul style="list-style-type: none"> <li>Entry-level Layer 2 switching With EIGRP stub</li> <li>Layer 2/3/4 services</li> <li>12 - 10/100/1000 PoE and 8 SFP ports on Supervisor</li> <li>Low Density SMB access/core</li> </ul>	<ul style="list-style-type: none"> <li>4503-E, 4503</li> </ul>

Detailed Cisco Catalyst 4500 Supervisor Matrix											
Supervisor Engines	Layer 2/3/4 Services	Bandwidth/ Throughput	Chassis Support	Line Card support	Uplinks	CPU/ DRAM	Nefflow Services	Number of Routes	Security/ QoS Entries	Input/ Output Policers	NAC/DHCP Snoop Entries
<a href="#">Supervisor 6-E Data Sheet</a>	Full Layer 2/3/4 EIGRP/OSPF/ BGP/IS-IS IPv6 in hardware	320 Gbps / 250 mpps	All E-Series and Classic	E-Series and Classic	4 GE or 2 10 GbE (TwinGig)	1.3 GHz/ 512 MB upgradable to 1 GB	No	256,000 routes	128,000 (8 queues per port)	16,000 input/output, user configurable	12,000/12,000
<a href="#">Supervisor V-10GE Data Sheet</a>	Full Layer 2/3/4 EIGRP/OSPF/ BGP/IS-IS	136 Gbps/ 102Mpps	All E-Series and Classic	Classic	4GE and 2 10GbE	800MHz/ 512 MB	Yes (built-in)	128K routes	64K	8000/8000	6000/6000
<a href="#">Supervisor V Data Sheet</a>	Full Layer 2/3/4 EIGRP/OSPF/ BGP/IS-IS	96 Gbps/ 72Mpps	All E-Series and Classic	Classic	2GE	400MHz/ 512 MB	Yes (optional)	128K routes	64K	1000/1000	3000/3000
<a href="#">Supervisor IV Data Sheet</a>	Full Layer 2/3/4 EIGRP/OSPF/ BGP/IS-IS	64 Gbps/ 48Mpps	4507R-E, 4507-R, 4506-E, 4506, 4503-E, 4503	Classic	2GE	333/ 512 MB	Yes (optional)	128K routes	64K	1000/1000	3000/3000
<a href="#">Supervisor II-Plus-10GE Data Sheet</a>	Basic Layer 2/3/4	108 Gbps/ 81Mpps	4507R-E, 4507-R, 4506-E, 4506, 4503-E, 4503	Classic	4GE and 2 10GbE	666MHz/ 256 MB/ 512 MB	No	32K routes	32K	512/512	3000/3000
<a href="#">Supervisor II-Plus Data Sheet</a>	Basic Layer 2/3/4	64 Gbps/ 48Mpps	4507R-E, 4507-R, 4506-E, 4506, 4503-E, 4503	Classic	2GE	266MHz/ 256 MB	No	32K routes	32K	512/512	3000/3000
<a href="#">Supervisor II-Plus-TS Data Sheet</a>	Basic Layer 2/3/4	64 Gbps/ 48Mpps	4503-E, 4503	Classic	8GE and 12 10/100/1000 PoE	266MHz 256 MB	No	32K routes	32K	512/512	3000/3000

# Unified Communications, Resiliency and Simplified Operations

The Cisco Catalyst 4500 Series Switch is a midrange modular platform for unified communications. It is designed for high resiliency, simplified operations, and maximum investment protection with backward and forward compatibility across generations

The Cisco Catalyst 4500 Series Switch extends a comprehensive set of intelligent network services to the network edge (the wiring closet), helping businesses of all sizes deploy secure, resilient, and scalable unified data, voice, and video networks. Key features include:

- **Secure unified communications** offers extensive integrated services and features to optimize and scale the network:

- **Power over Ethernet (PoE):** Get comprehensive support for a broad range of PoE end devices, including 802.11n wireless access points, and up to 30W PoE per port for future applications.
- **Intelligent services:** Optimize and secure your network with hardware-based quality of service, multicast, security, IPv6 and integrated management features
- **Scalability:** Grow your network and services with up to 384 PoE ports, up to 34 10 Gigabit Ethernet capability, and ample hardware resources to support concurrent services.
- **Resiliency:** Hardware and software based resiliency features minimize planned and unplanned network downtime
  - **Hardware resiliency:** All critical components, such as supervisors, power supplies, and fans, are redundant.
  - **Software resiliency:** Subsecond supervisor switchover (SSO) and Cisco In Service Software Upgrade (ISSU) occur without dropping IP calls.
  - **Extensive security features:** Network disruptions from security threats are minimized.
- **Simplified operations** designed to lower total cost of ownership for first-time configurations, ongoing operations, and troubleshooting:
  - **Embedded Event Manager (EEM):** Simplify both routine and extraordinary events with a customized approach to EEM event detection, recovery, and automation.
  - **Operational features:** Minimize operational and troubleshooting tasks with CPU monitoring, Cisco ISSU, IOS IP SLA, Smartports, AutoQoS, Remote Switched Port Analyzer, Link Layer Discovery Protocol-Media Endpoint Discovery, Discovery Protocol, and CiscoWorks.
  - **Hot-swappable components:** Supervisor, line cards, power supplies, and fan tray are hot-swappable.
- **Investment protection** - Extensive investment protection with backward and forward compatibility across Cisco Catalyst 4500 Series generations dating back to 1999, maximizing return on investment:
  - **Backward and forward compatibility:** Mix new Cisco Catalyst 4500 E-Series line cards and classic line cards in the same chassis without performance degradation.
  - **Investment enhancement:** Upgrade currently deployed classic line card features with a simple upgrade to the Cisco Catalyst 4500 Supervisor Engine 6-E.
  - **IPv4 and IPv6:** The switch is optimized for simultaneous IPv4/IPv6 deployment or migration.

For centralized management, [Cisco Network Assistant](#) simplifies configuration and administration. Available at no charge, the Cisco Network Assistant provides configuration wizards that greatly simplify the implementation of intelligent network services.

**Call 630-692-2702 or email: [sales@dccil.com](mailto:sales@dccil.com)**

