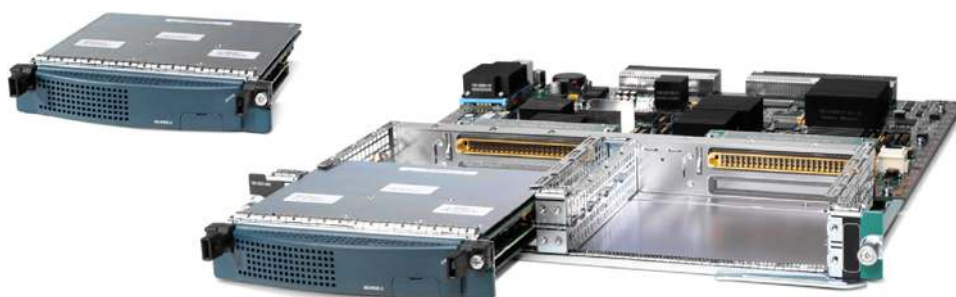


## Cisco Catalyst 6500 Series Services SPA Carrier-600

### Product Overview

The Cisco® Catalyst® 6500 Series Services SPA Carrier-600 helps enable high-performance IP Security (IPsec) VPN services for secure transport of mission-critical data across the network. It provides enterprises and service providers tremendous flexibility and density as they scale their network infrastructure and expand secure, remote services to branch offices and offsite users.

**Figure 1.** Cisco Services SPA Carrier-600 with Two Cisco VPN Services Port Adapters



Cisco Catalyst 6500 Series Switches offer innovative, next-generation converged services for enterprises and service providers. The Cisco Services SPA Carrier-600 and Cisco Catalyst 6500 Series VPN Services Port Adapter (VSPA) form the cornerstone of the IPsec VPN technology, and they help enable tremendous cost savings and new revenue streams.

### Features and Benefits

Table 1 gives the primary features of the Cisco Services SPA Carrier-600.

**Table 1.** Features and Benefits of Cisco Services SPA Carrier-600

Feature	Cisco Services SPA Carrier-600	Benefit
<b>Modularity</b>	Up to 2 Cisco VSPAs per Cisco Services SPA Carrier-600	Creates investment protection and offers flexibility for the Cisco Catalyst 6500 Series Switches
<b>Scalability</b>	Up to 10 Cisco Services SPA Carrier-600 modules and 10 Cisco VSPAs in a Cisco Catalyst 6500 chassis	Offers high-density, high-performance IPsec VPN services while maintaining attractive footprint and tremendous scalability
<b>Switch fabric connectivity</b>	Supported	Enables the use of 720-Gbps switch fabric modules for data forwarding
<b>Online insertion and removal (OIR)</b>	Supports OIR of both the Cisco Services SPA Carrier-600 and the Cisco VSPA	Increases high availability and provides operational ease of use

### Product Specifications

Table 2 gives specifications of the Cisco Services SPA Carrier-600.

**Table 2.** Product Specifications

Features	Descriptions
<b>Compatibility</b>	Compatibility Cisco Catalyst 6500 Series Supervisor Engine 32, 720 Series, or VSS-10G
<b>Minimum software compatibility</b>	Cisco IOS® Software Release 12.2 SXI or later native or modular Cisco IOS Software releases

Features	Descriptions
<b>Slot configuration</b>	2 double-height Cisco VSPA bays per Cisco Services SPA Carrier-600
<b>Features and benefits</b>	<ul style="list-style-type: none"> <li>• High performance: 8 Gbps full duplex for each full-height, singlewide slot provides capacity for high-density aggregation</li> <li>• Switch fabric connectivity: Allows system scalability up to 720 Gbps by offering switch fabric connectivity</li> <li>• 32 MB egress packet buffer</li> <li>• OIR of the Cisco Services SPA Carrier-600 and the Cisco VSPAs</li> </ul>
<b>Supported SPAs</b>	Cisco VSPA
<b>Environmental conditions</b>	<ul style="list-style-type: none"> <li>• Operating temperature: 32 to 104°F (0 to 40°C)</li> <li>• Storage temperature: -40 to 167°F (-20 to 70°C)</li> <li>• Relative humidity: 10 to 90%, noncondensing</li> <li>• Operating altitude: -60 to 2000m</li> </ul>
<b>Reliability and availability</b>	OIR of the Cisco Services SPA Carrier-600 and the Cisco VSPAs
<b>Network management</b>	Supported with CiscoWorks and CiscoView and CiscoWorks Resource Manager Essentials (RME)
<b>Physical specifications</b>	<ul style="list-style-type: none"> <li>• Occupies one slot in a Cisco Catalyst</li> <li>• Requires Cisco Catalyst 6500 Series Supervisor Engine 32, or 720 Series</li> <li>• Dimensions (H x W x D): 1.75 x 15.375 x 16 in.</li> <li>• Dimensions (H x W x D): 4.45 x 39.05 x 40.64 cm</li> </ul>
<b>Power</b>	150W power consumption per Cisco Services SPA Carrier-600 300W maximum power consumption with Cisco Services SPA Carrier-600 and two Cisco VSPAs
<b>Indicators</b>	Cisco Services SPA Carrier-600 status: green (operational); orange (faulty)

Tables 3 and 4 give regulatory compliance for the Cisco Services SPA Carrier-600.

**Table 3.** Regulatory Standards Compliance: Safety and EMC

Specification	Description
<b>Regulatory Compliance</b>	Products should comply with CE Markings per directives 2004/108/EC and 2006/95/EC
<b>Safety</b>	<ul style="list-style-type: none"> <li>• UL 60950</li> <li>• CAN/CSA-C22.2 No. 60950</li> <li>• EN 60950</li> <li>• IEC 60950</li> <li>• AS/NZS 60950</li> </ul>
<b>EMC—Emissions</b>	<ul style="list-style-type: none"> <li>• 47CFR Part 15 (CFR 47) Class A</li> <li>• AS/NZS CISPR22 Class A</li> <li>• CISPR2 2 Class A</li> <li>• EN55022 Class A</li> <li>• ICES003 Class A</li> <li>• VCCI Class A</li> <li>• EN61000-3-2</li> <li>• EN61000-3-3</li> <li>• KN22 Class A</li> <li>• CNS13438 Class A</li> </ul>
<b>EMC—Immunity</b>	<ul style="list-style-type: none"> <li>• EN50082-1</li> <li>• EN61000-6-1</li> <li>• EN55024</li> <li>• CISPR24</li> <li>• EN300386</li> <li>• KN immunity series</li> </ul>

**Table 4.** NEBS Compliance and ETSI 300-019 Environmental Requirements

Specification	Description
<b>NEBS Criteria Levels</b>	SR-3580 NEBS level 3 (GR-63-CORE, issue 3, GR-1089 CORE, issue 4)
<b>Verizon NEBS Compliance</b>	Telecommunications Carrier Group (TCG) Checklist
<b>Qwest NEBS requirements</b>	Telecommunications Carrier Group (TCG) Checklist
<b>ATT NEBS Requirements</b>	ATT TP76200 level 3, TP7645 and TCG Checklist
<b>ETSI</b>	<ul style="list-style-type: none"> <li>• ETS 300 019-1-1, Class 1.2 Storage</li> <li>• ETS 300 019-1-2, Class 2.3 Transportation</li> <li>• ETS 300 019-1-3, Class 3.2 Stationary Use</li> </ul>

### Ordering Information

To place an order, visit the [Cisco Ordering Home Page](#) or refer to Table 4.

**Table 5.** Ordering Information

Part Number	Product Name
<b>WS-IPSEC-3</b>	VPN Services Port Adaptor
<b>WS-SSC-600</b>	Services SPA Carrier—600
<b>WS-IPSEC-SSC600-L1</b>	Cisco 6500 IPsec VSPA Bundle 1 (system only)
<b>WS-IPSEC-SSC600-L2</b>	Cisco 6500 IPsec VSPA Bundle 2 (system only)
<b>WS-C6504-E-VPN+-K9</b>	Cisco Catalyst 6504E IPsec VSPA Security System
<b>WS-C6506-E-VPN+-K9</b>	Cisco Catalyst 6506E IPsec VSPA Security System
<b>WS-C6509-E-VPN+-K9</b>	Cisco Catalyst 6509E IPsec VSPA Security System
<b>WS-C6513-VPN+-K9</b>	Cisco Catalyst 6513 IPsec VSPA Security System

### Service and Support

Cisco offers a wide range of services programs to accelerate customer success. These innovative services programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco Services help you protect your network investment, optimize network operations, and prepare your network for new applications to extend network intelligence and the power of your business. For more information about Cisco Services, refer to [Cisco Technical Support Services](#) or [Cisco Advanced Services](#).

### For More Information

For more information about the Cisco Services SPA Carrier-600 and the Cisco SPA/SIP portfolio, visit <http://www.cisco.com/go/spa> or contact your local Cisco account representative.



**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
Singapore

**Europe Headquarters**  
Cisco Systems International BV  
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0807R)

Printed in USA

C78-491727-00 08/08