

# 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
Modularity	Up to 2 Cisco VSPAs per Cisco Services SPA Carrier-600	Creates investment protection and offers flexibility for the Cisco Catalyst 6500 Series Switches
Scalability	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
Switch fabric connectivity	Supported	Enables the use of 720-Gbps switch fabric modules for data forwarding
Online insertion and removal (OIR)	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
Compatibility	Compatibility Cisco Catalyst 6500 Series Supervisor Engine 32, 720 Series, or VSS-10G
Minimum software compatibility	Cisco IOS® Software Release 12.2 SXI or later native or modular Cisco IOS Software releases

Features	Descriptions	
Slot configuration	2 double-height Cisco VSPA bays per Cisco Services SPA Carrier-600	
Features and benefits	High performance: 8 Gbps full duplex for each full-height, singlewide slot provides capacity high-density aggregation	
	Switch fabric connectivity: Allows system scalability up to 720 Gbps by offering switch fabric connectivity	
	32 MB egress packet buffer	
	OIR of the Cisco Services SPA Carrier-600 and the Cisco VSPAs	
Supported SPAs	Cisco VSPA	
Environmental	Operating temperature: 32 to 104年 (0 to 40℃)	
conditions	• Storage temperature: -40 to 167年 (-20 to 70℃)	
	Relative humidity: 10 to 90%, noncondensing	
	Operating altitude: -60 to 2000m	
Reliability and availability	OIR of the Cisco Services SPA Carrier-600 and the Cisco VSPAs	
Network management	Supported with CiscoWorks and CiscoView and CiscoWorks Resource Manager Essentials (RME)	
Physical specifications	Occupies one slot in a Cisco Catalyst	
	Requires Cisco Catalyst 6500 Series Supervisor Engine 32, or 720 Series	
	• Dimensions (H x W x D): 1.75 x 15.375 x 16 in.	
	• Dimensions (H x W x D): 4.45 x 39.05 x 40.64 cm	
Power	150W power consumption per Cisco Services SPA Carrier-600	
	300W maximum power consumption with Cisco Services SPA Carrier-600 and two Cisco VSPAs	
Indicators	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
Regulatory Compliance	Products should comply with CE Markings per directives 2004/108/EC and 2006/95/EC
Safety	<ul> <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>
EMC—Emissions	<ul> <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>
EMC—Immunity	<ul> <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	
NEBS Criteria Levels	SR-3580 NEBS level 3 (GR-63-CORE, issue 3, GR-1089 CORE, issue 4)	
Verizon NEBS Compliance	Telecommunications Carrier Group (TCG) Checklist	
Qwest NEBS requirements	Telecommunications Carrier Group (TCG) Checklist	
ATT NEBS Requirements	ATT TP76200 level 3, TP7645 and TCG Checklist	
ETSI	ETS 300 019-1-1, Class 1.2 Storage     ETS 300 019-1-2, Class 2.3 Transportation	
	• ETS 300 019-1-2, Class 2.3 Halisportation  • ETS 300 019-1-3, Class 3.2 Stationary Use	

## **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
WS-IPSEC-3	VPN Services Port Adaptor
WS-SSC-600	Services SPA Carrier—600
WS-IPSEC-SSC600-L1	Cisco 6500 IPSec VSPA Bundle 1 (system only)
WS-IPSEC-SSC600-L2	Cisco 6500 IPSec VSPA Bundle 2 (system only)
WS-C6504-E-VPN+-K9	Cisco Catalyst 6504E IPSec VSPA Security System
WS-C6506-E-VPN+-K9	Cisco Catalyst 6506E IPSec VSPA Security System
WS-C6509-E-VPN+-K9	Cisco Catalyst 6509E IPSec VSPA Security System
WS-C6513-VPN+-K9	Cisco Catalyst 6513 IPSec VSPA Security System

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### For More Information

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



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