



# Cisco IPsec VPN Hardware for Cisco 7200 Series Routers

Secure Communications from Anywhere

## Hardware Acceleration Elevates Cisco 7200 Series VPN Performance and Scalability

Computer data networks rely on IPsec VPN for data security and regulatory compliance in all sectors. Businesses, governments, and educational institutions all expect optimum performance and scalability on a cryptographic system that enables the network, instead of requiring that the network conform to cryptographic limitations.

Cisco® midrange routing platforms with the Cisco VPN Services Adapter (VSA) or the Cisco VPN Acceleration Module 2+ (VAM2+) deliver the performance and scalability to address enterprise requirements, while Cisco IOS® Software offers VPN topology options that can answer most typical functional requirements. VPN capabilities interoperate with other Cisco IOS Software-based router features to provide industry-certified, regulation-compliant security with the industry's broadest set of network infrastructure features and WAN connectivity options.



- Security certifications: Common Criteria and FIPS 140-2
- Ease of use: Cisco Router and Security Device Manager (SDM) and Cisco Security Manager offer simplified configuration
- Feature interoperability: Multiple VPN options support multicast traffic, dynamic routing, and QoS
- More information is available at <http://www.cisco.com/go/vpn>

Cisco IPsec VPN Feature Set	Details
<b>Site-to-Site IPsec</b>	<ul style="list-style-type: none"> <li>• Standards-compliant IPsec offers multivendor interoperability</li> <li>• Addition of GRE introduces dynamic routing and multicast capabilities</li> </ul>
<b>Easy VPN</b>	<ul style="list-style-type: none"> <li>• Offers remote-access connectivity for mobile users, telecommuters, and centrally managed site-to-site connections using a PC/Mac/Linux-based software client and hardware-device client</li> <li>• Centrally stored security policies are pushed to remote users</li> <li>• Integrates VPN traffic with QoS, high scalability, and performance through hardware-assisted cryptography</li> </ul>
<b>Dynamic Multipoint VPN (DMVPN)</b>	<ul style="list-style-type: none"> <li>• Ideal for large-scale VPNs that require voice, multicast, and dynamic routing capabilities</li> <li>• Supports spoke-to-spoke on-demand connectivity for VPN deployments over public networks</li> <li>• Integrates with dynamic routing to establish VPN connectivity</li> </ul>
<b>Group Encrypted Transport VPN (GET VPN)</b>	<ul style="list-style-type: none"> <li>• Provides full-mesh tunnelless encryption for large-scale routable network deployments</li> <li>• Offers any-to-any connectivity without the administrative, scale, or performance burdens that are typically associated with full-mesh capability on large VPNs</li> <li>• Tunnelless VPN applies centrally managed encryption and QoS policies to answer traffic prioritization requirements</li> </ul>

## Cisco VSA and Cisco VAM2+ Comparison

Feature	NPE-G2/ VAM2+	NPE-G2/ VSA
<b>Form Factor</b>	Port adapter	I/O controller slot
<b>Network Processing Engine (NPE) Support</b>	400, G1, G2	G2
<b>IPsec Performance* (Max/IMIX)</b>	260 Mbps/200 Mbps	960 Mbps/830 Mbps
<b>GRE/IPsec Performance* (Max/IMIX)</b>	240 Mbps/140 Mbps	960 Mbps/630 Mbps
<b>Scale</b>	Up to 5000 IPsec tunnels	Up to 5000 IPsec tunnels
<b>SADB Lookup</b>	NPE-G1/NPE-G2	On-board TCAM
<b>IPPCP (Compression)</b>	Yes	No
<b>IPsec High Availability</b>	Chassis 2 Chassis	Chassis 2 Chassis
<b>IPsec+IPv6</b>	Cisco IOS Software Release 12.4(4)T	Future Cisco IOS Software release
<b>GET VPN</b>	Yes	Yes

\* Aggregate performance at 1000 tunnels



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## Cisco Midrange Router Product Family

Cisco midrange routers offers outstanding flexibility and performance.

- Broadest range of WAN connectivity options available in routing products
- Investment protection through modular, upgradable platform
- High availability through redundant power and chassis-to-chassis failover capabilities
- Mature feature set integrates VPN and threat mitigation capabilities with network infrastructure

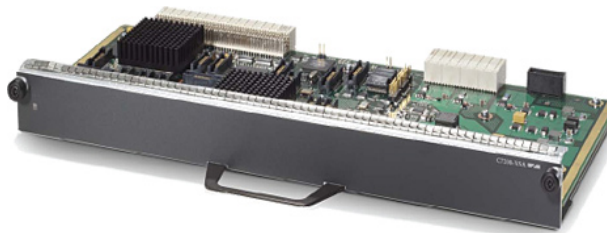


## VSA

Cisco VSA provides high performance and scalability for the Cisco 7206VXR or 7204VXR platforms with Network Processing Engine G2 (NPE-G2).

### Key features:

- Up 5000 tunnels (10,000 IPsec SAs, 5000 IKE SAs)
- Supports DES, 3DES, AES (128-, 192-, 256-bit) encryption
- 960 Mbps IPsec aggregate throughput with 1400 byte packets and 1000 active tunnels
- 830 Mbps IPsec aggregate throughput with IMIX style traffic and 1000 active tunnels



## VAM2+

Cisco VAM2+ offers mature feature support for Cisco 7204VXR, 7206VXR, and 7301 platforms in a lower-cost module to provide hardware-accelerated encryption capability to networks.

### Key features:

- Up to 5000 tunnels (10,000 IPsec SAs, 5000 IKE SAs)
- Supports DES, 3DES, AES (128-, 192-, 256-bit) encryption
- 260 Mbps IPsec aggregate throughput with 1400 byte packets and 1000 active tunnels
- 200 Mbps IPsec aggregate throughput with IMIX style traffic and 1000 active tunnels
- Supports IPv6 IPsec in Cisco IOS Software Release 12.4(6)T and later releases
- Offers a port adapter jacket card option to increase throughput and slot density for Cisco 7204VXR and 7206VXR platforms by providing access to an additional system bus



## Ordering Information

SKU	Components
<b>7206VXRG2/2+VPNK9</b>	Cisco 7206VXR chassis, NPE-G2, 3 GE/FE, VAM2+, C7200-JC-PA, 256 MB flash, 1 GB DRAM, Advanced Security image on Cisco IOS Software Release 12.4(15)T
<b>7301/2+VPNK9</b>	Cisco 7301 Chassis, VAM2+, 512 MB DRAM, S731CHK9-1248, IP/FW/IDS IPsec 3DES on Cisco IOS Software Release 12.4(12)
<b>7206VXRG2/VSAVPNK9</b>	Cisco 7206VXR Chassis, NPE-G2, 3 GE/FE VSA, 256 MB flash, 1 GB DRAM, Advanced Security image on Cisco IOS Software Release 12.4(15)T
<b>C7200-JC-PA=</b>	Cisco 7200 Series Port Adapter Jacket Card
<b>SA-VAM2+=</b>	Cisco VPN Accelerator Module 2+ (VAM2+)
<b>C7200-VSA=</b>	Cisco VPN Services Adapter (VSA)

## For More Information

For more information, visit <http://www.cisco.com/go/vpn> and [http://www.cisco.com/en/US/products/ps8768/prod\\_module\\_series\\_home.html](http://www.cisco.com/en/US/products/ps8768/prod_module_series_home.html).