

## Cisco VPN Acceleration Module 2+

### Overview

The VPN Acceleration Module 2+ (VAM2+) for Cisco 7301 and 7200VXR Series routers provides high-performance encryption/compression and key generation services for IPsec virtual private network (VPN) applications. Like the VAM2, the VAM2+ supports both Data Encryption Standard (DES), triple DES, and Advanced Encryption Standard (AES) 128-bit keys but adds hardware-acceleration for 192 and 256-bit AES keys. The VAM2+ continues to provide hardware-assisted Layer-3 compression services integral with its encryption services, conserving bandwidth and lowering network connection costs over secured links. This combination of security features and advanced network services offers a flexible, integrated approach to accommodate the most diverse enterprise or service provider network environments.

### Features at a Glance

The VAM2+ supports DES, 3DES, and AES IPsec encryption at up to 280 Mbps while maintaining support for 5000 simultaneous tunnels. The VAM2+ also integrates hardware-assisted RSA and IP Payload Compression Protocol (IPPCP) Lempel-Ziv-Stac (LZS) compression, accelerating RSA processing speeds, tunnel setup and creation time improving overall VPN initialization while compressing payload data for streamlined communications. Thus in those environments where bandwidth is costly, VAM2+ is able to compress network traffic before it is encrypted and sent over pay-per-byte WAN connections saving transmission costs and improving overall throughput.

Features	Description
<b>Physical</b>	Service adapter-Installs in a single port adapter slot on the Cisco 7301 or 7200 Series routers
<b>Platform support</b>	Cisco 7301 and 7200 Series with NPEG2, NPE G1 or NPE-400
<b>Throughput—Single VAM2+*</b>	Up to 280 Mbps using 3DES or AES
<b>Number of IPsec protected tunnels**</b>	Up to 5000 tunnels
<b>Hardware-based encryption</b>	Data protection: IPsec DES, 3DES, AES Authentication: RSA and Diffie-Hellman Data integrity: SHA-1 and Message Digest 5 (MD5)
<b>VPN tunneling</b>	IPsec tunnel mode; generic routing encapsulation (GRE) and Layer 2 Tunneling Protocol (L2TP) protected by IPsec
<b>Hardware-based compression</b>	Layer 3 IPPCP LZS
<b>LAN/WAN interface selection</b>	On the Cisco 7200 Series, VAM2+ works with most Cisco 7200 VXR-compatible port adapters
<b>Minimum Cisco IOS Software Release supported</b>	12.3(12) or 12.3(11)T3 Advanced Security or higher feature set
<b>Standards supported</b>	IPsec/IKE: RFCs 2401-2411, 2451 IPPCP: RFC 2393, 2395

\*As measured with IPsec 3DES HMAC-SHA1 on 1400 byte packets.

\*\*512MB of memory is required to support 5000 tunnels.

## Cisco Management Software for IPSec VPNs

### Single Device Management

The Cisco® Router and Security Device Manager (SDM) is an intuitive, Web-based device management tool for Cisco IOS® routers. Cisco SDM simplifies router and security configuration through intelligent wizards, enabling customers to quickly and easily deploy, configure, and monitor a Cisco router without requiring knowledge of the Cisco IOS Software command-line interface (CLI). <http://www.cisco.com/en/US/partner/products/sw/secursw/ps5318/index.html>

### Multiple Device Management

Cisco Security Manager (CS Manager), an integral part of the SAFE blueprint for network security, combines Web-based tools for configuring, monitoring, and troubleshooting enterprise virtual private networks (VPNs), firewalls, and network and host-based intrusion detection systems (IDS). CS Manager delivers the industry's first robust and scalable foundation and feature set that addresses the needs of small and large-scale VPN and security deployments.

For more information about Cisco Security Manager 3.1, visit <http://www.cisco.com/go/csmanager>

### Ordering Information

VAM2+ support begins in Cisco IOS® Software Release 12.3(12) or 12.3(11)T3 advanced security or higher feature set. Cisco 7301 and 7200 security bundles are currently available that include VAM2+ for easy ordering at a bundle discount.

Part Number	Description
<b>SA-VAM2+</b>	VPN Acceleration Module 2+ for the Cisco 7301 and 7200 Series
<b>SA-VAM2+=</b>	VPN Acceleration Module 2+ for the Cisco 7301 and 7200 Series, Spare
<b>7206VXRG2/2+VPNK9</b>	Cisco 7206 VXR chassis, NPE-G2 , VAM2+ Bundle (includes Chassis, NPE, VAM2+, PA Jacket Card & Advanced Security image)
<b>7206VXRG1/2+VPNK9</b>	Cisco 7206 VXR chassis, NPE-G1 , VAM2+ Bundle (includes Chassis, NPE, VAM2+ & Advanced Security image)
<b>CISCO7301/2+VPNK9</b>	Cisco 7301 chassis (with integrated NPE-G1) & VAM2+ Bundle (includes Chassis, NPE, VAM2+ & Advanced Security image)

### Export Regulations

3DES software for the VAM2+ is controlled by U.S. export regulations on encryption products. The module itself is not controlled. U.S. regulations require the recording of names and addresses of recipients of DES and 3DES software. For more details, see <http://www.cisco.com/www/export/crypto/>.

## Certifications

Cisco is committed to maintaining an active product certification and evaluation program for customer's worldwide. We recognize that certifications and evaluations are important to our customers, and we continue to be a leader in providing certified and evaluated products to the marketplace. We also will continue to work with international security standards bodies to help shape the future of certified and evaluated products, and will work to accelerate certification and evaluation processes. Certification and evaluation are considered at the earliest part of our product development cycle, and we will continue to position our security products to insure that customers have a variety of certified and evaluated products to meet their needs. For security certification product details, see

[http://www.cisco.com/en/US/partner/netsol/ns340/ns394/ns171/networking\\_solutions\\_audience\\_business\\_benefit0900aecd8009a16f.html](http://www.cisco.com/en/US/partner/netsol/ns340/ns394/ns171/networking_solutions_audience_business_benefit0900aecd8009a16f.html)



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