



## Avaya™ SG200 Security Gateway

The Avaya™ SG200 Security Gateway delivers security as an integrated component of Avaya enterprise IP telephony solutions. With stateful H.323-aware firewall, advanced bandwidth management, and scalable VPN capabilities, the SG200 provides the ideal Firewall/VPN (Virtual Private Network) security solution for small and medium businesses, as well as branch offices, looking for a complete solution for securing their voice and data communications.

### H.323-aware Firewall and NAT

The SG200 is the ideal firewall security solution for Avaya™ Communication Manager Software and Avaya™ IP Office applications in corporate networks deploying converged voice and data communications. Designed to provide security coverage in a converged network infrastructure, the SG200 features a stateful multilayer inspection firewall with an integrated H.323 Application Proxy that addresses VoIP deployment issues in environments with firewall perimeter security and NAT services.

Acting as an intermediary between H.323 terminals and gateways, the Application Proxy intelligently validates and filters H.323 RAS and signaling

exchanges, identifies negotiated ports, and dynamically opens and closes these ports in the firewall only as required to support the connection. The SG200's ability to validate H.323 signaling exchanges and intelligently adapt security policies for verified H.323 connections allows enterprises to safely deploy VoIP solutions through a secure firewall perimeter. These services are complementary to the Avaya™ Encryption Algorithm (AEA), and will work transparently with any Avaya IP phone running encryption. The SG200's Application Proxy also provides Network Address Translation (NAT) for both the layer 3 IP and embedded H.323 addresses, allowing VoIP services to traverse networks that require the deployment of NAT services.

### Bandwidth Management Support for VoIP

An integrated bandwidth manager gives network administrators the flexibility to partition and allocate bandwidth as required to ensure critical VoIP and data communication are not impacted by non-critical applications. Utilizing a Class-Based Queuing (CBQ) architecture, the SG200 supports a VoIP class and 3 user-defined data classes, each with its own queue and configurable bandwidth allocation setting. Bandwidth borrowing and traffic bursting support for VoIP allow voice communications to efficiently take advantage of additional bandwidth when available.





## **Performance from Day One, VPN Capacity that Grows with You**

Instead of VPN encryption services in software, which require an expensive hardware encryption upgrade to support more demanding services such as VoIP, the SG200 takes a convergence-oriented approach to VPN deployment.

The base SG200, which supports up to 50 remote access users and 25 site-to-site VPN connections, integrates a high-performance hardware-based VPN acceleration engine that supports VoIP from day one. Base systems can be easily expanded at any time in the field with software license upgrades to add more remote users and site-to-site sessions to a maximum of 500 remote access users and 150 site-to-site sessions. By licensing based on session capacity, and not performance, users can be sure that even the base SG200 unit has the performance to support VoIP and other demanding applications out of the box.

## **Designed for Flexible Deployment**

The SG200 supports PPPoE and DHCP dynamically assigned IP addresses on its public interface, allowing it to be easily deployed in environments using broadband services such as

DSL and cable networks. DHCP relay is supported for hosts on the private network, and the SG200 can act as a back-up DHCP server if the remote server is not available. In this mode, the SG200 provides regular DHCP services and can also push IP address, TFTP Server and Gatekeeper parameters down to Avaya™ IP Telephones for registration purposes (option 176).

The SG200 also takes a flexible approach to expansion. Instead of proprietary and costly expansion slots, the SG200 features an industry-standard CardBus/PCMCIA slot that will accept a variety of future interface-expansion cards. Planned expansion options for the CardBus slot, which will be software-enabled in a future release, include 10/100 interfaces for DMZ and support for wireless LAN connectivity.

## **Manage Global Firewall and VPN Security Policies Centrally**

The SG200 Stateful Multilayer Inspection (SMI) firewall features advanced VoIP security and TCP/UDP/ICMP stateful tracking capabilities, yet is designed to be easy to manage. Avaya VPNmanager® Software offers centralized management capabilities of Avaya VSU Security Gateways and VPNremote® Client Software. Built on a client/server architecture that combines a Java console and an LDAP directory server, VPNmanager Software delivers the scalability and performance to effectively manage thousands of VPNs, VPN gateways, and remote access users.

With VPNmanager Software version 3.3, Avaya introduces global firewall policy management, allowing administrators to centrally define firewall policies that can be distributed in real-time to predefined groups of gateways, or globally to all firewall gateways. DoS attack protection settings can also be defined centrally for global distribution.

For local management, the SG200 features a Web graphical interface accessible through HTTPS, offering configuration wizards for firewall and VPN configuration, and options for monitoring and logging firewall, VPN, and device events. The SG200 also offers a full-featured command line interface (CLI), accessible via the console port of the gateway that supports all device commands.



The SG200 allows enterprises to deploy Avaya Communication Manager Software and Avaya™ Unified Communications Center, and other advanced IP-enabled communications applications with secure, integrated firewall and VPN coverage.

Designed to support the new wave of flexible IP-enabled workforce solutions, the SG200 enables enterprises to securely expand the boundaries of their critical corporate communications.

## Key Features

### Performance

• Firewall Concurrent Sessions	30,000
• Firewall Performance	50 Mbps
• 3DES (168 bit) Encryption	10 Mbps
• Base System Remote VPN Users	50
• Maximum Concurrent Remote VPN Users	500
• Base System Site-to-Site VPN tunnels	25
• Maximum Site-to-Site VPN tunnels	150

### Interfaces

• Integrated network ports	Two 10/100 Fast Ethernet (RJ-45)
• Expansion	One CardBus/PCMCIA slot
• Console Port	RS-232 (RJ-45) 9600 baud

### Firewall

- H.323 Application Level Gateway (H.225, H.245, Fast Connect)
- FTP Application Level Gateway
- TCP/UDP/ICMP state tracking
- DoS/DDoS attack protection
- Distributed firewall policy management (with VPNmanager 3.3)

### VPN

- IKE key management (RFC 2409)
- MD5 and SHA-1 data authentication
- DES (56-bit) and 3DES (169-bit) encryption
- Perfect Forward Secrecy
- VPN fail-over support

- IPSec Compliance: RFC 2401/2402/2403/2404/2405/2406/2407/2408/2409/2410/2412/2451

### Traffic Management

- Configurable bandwidth allocation
- Class-Based Queuing Architecture
- 4 user-configurable classes of traffic

### IP Address Assignment

- Untrusted Interface: Static, and dynamic via DHCP client or PPPoE client
- Trusted Interface: DHCP relay and DHCP server

### Management

- Web Interface (HTTPS)
- Command Line Interface (console)
- VPNmanager (SSL)
  - Global VPN policies management
  - Global firewall policies management
  - Global remote access user management
- SNMP v1/v3 monitoring

### Technical Specifications

• Processor	133MHz AMD-SC520
• Random Access Memory (RAM)	64MB
• Flash Memory	32MB

### Dimensions and Power

- Dimensions (D x W x H) 6.7" x 7.7" x 2.4"  
170 mm x 196 mm x 61 mm
- Weight 1.5 lbs / .7 kg

## Environmental Requirements

Item	Operating Specification
Temperature	32-104° F, 0-40° C
Relative Humidity	5-90%, non-condensing
Altitude	0-12000 feet, 0-3660 meters

## Certifications

Safety	C/US, CE, CB, CSA/US, CSA/C/US
Emissions	FCC Class B, EN, VCCI, AUS/NZ

## Ordering Information

Product	Description	Material Code
SG200 Base System	Firewall/VPN Gateway with license for 50 remote access users and 25 site-to-site VPN tunnels	700242308
VPNremote 4 User Bundle	License for additional 5 remote users	700258049
VPNremote 10 User Bundle	License for additional 10 remote users	700256118
VPNremote 25 User Bundle	License for additional 25 remote users	700256412
VPNremote 50 User Bundle	License for additional 50 remote users	700256159
VPNremote 75 User Bundle	License for additional 75 remote users	700256167
VPNremote 100 User Bundle	License for additional 100 remote users	700256175
VPNremote 200 User Bundle	License for additional 200 remote users	700256183
SG200 remote site license	Site license for 500 (total) remote users	700256191
VPN 1 Site to Site Bundle	License for additional 1 VPN site to site connection	700256399
VPN 5 Site to Site Bundle	License for additional 5 VPN site to site connection	700256407
VPN 10 Site to Site Bundle	License for additional 10 VPN site to site connection	700256415
VPN 50 Site to Site Bundle	License for additional 50 VPN site to site connection	700256423
VPN 125 Site to Site Bundle	License for additional 125 VPN site to site connection	700258056

For additional information on our VPN Solutions, please contact your Avaya Client Executive, Authorized BusinessPartner, or visit us at

[avaya.com/learnmore/ip](http://avaya.com/learnmore/ip). For more information about Avaya and our other award-winning solutions, visit [avaya.com](http://avaya.com).

### About Avaya

Avaya enables businesses to achieve superior results by designing, building and managing their communications networks. More than one million businesses worldwide, including 90 percent of the FORTUNE 500®, rely on Avaya solutions and services to enhance value, improve productivity and gain competitive advantage.

Focused on enterprises large to small, Avaya is a world leader in secure and reliable IP telephony systems, communications software applications and full life-cycle services. Driving the convergence of voice and data communications with business applications — and distinguished by comprehensive worldwide services — Avaya helps customers leverage existing and new networks to unlock value and enhance business performance.



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