



# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

## SnapGear — Firewalls



### Overview

SnapGear delivers a broad range of security appliances that scale across regional, branch and small office networks with the ability to easily integrate remote and mobile workers. Now enterprise-class security with exceptional price/performance is available to SME customers and large replicated installations such as

POS, hospitality and automation. All products have free lifetime firmware upgrades and no artificially imposed user or tunnel licensing restrictions.

### Overview

#### Stateful Firewall

With ICSA Certified dynamic firewall technology underpinning all products SnapGear customers are assured of the highest levels of stateful firewall protection. The highly configurable SnapGear firewalls are highly resistant to denial of service attacks and intrusion attempts while actively repelling common probes such as port scanning.

#### VPN

IPSec peer-to-peer VPN (Virtual Private Networking) technology is integral to all products. Popular commercial encryption algorithms are supported such as 3DES and AES. PPTP client and server is also available in all products. In fact, SnapGear developed the world's first Linux PPTP server - PoPToP.

#### Network Management

SnapGear appliances are easily configurable with either browser based management or conventional CLI (Command Line Interface). With SnapGear CMS (Central Management System), network administrators may take command of anywhere up to thousands of units and manage upgrades, policies, and other configuration at the click of a mouse.

#### Powered by SnapGear Embedded Linux

SnapGear are leaders in embedded Linux security. All SnapGear appliances are powered by stable, secure and highly configurable firmware based upon embedded Linux. This provides a virtually unlimited range of precise tuning options for such elements as QoS (Quality of Service), VPN tunnel topology, routing and fine-grained firewall rule sets.

#### URL Content Filtering

Powered by Cerberian, all SnapGear appliances can optionally guard your Internet perimeter with a policy-based approach to blocking inappropriate web sites.

#### Fail over & Load Balancing

SnapGear products have a serial port for attaching a modem to allow fall back to narrowband for external ISDN/analog modems. With the powerful SME570 and SME575, customers may choose to attach dual broadband Internet service connections. This approach allows uninterrupted Internet access and the ability to maximize bandwidth usage.

#### Intrusion Detection

The entire SnapGear appliance family includes measures to disrupt conventional scanning attacks. The SME575 includes an active IDS (Intrusion Detection System) powered by Snort™ to proactive-

ly monitor and alert systems staff of suspicious activity. The system assists with intrusion mitigation by profiling traffic bi-directionally to help track down compromised systems. Web Proxy Cache The SME575 includes the option of a web proxy cache, powered by Squid™ technology. This is useful for both accelerating access to commonly used Internet web sites and also minimizing Internet traffic, freeing bandwidth for other applications.

#### Fully Customizable

SnapGear products are highly configurable. In addition, SnapGear offers tailored services to enterprise customers where a unique blend of firmware and even hardware is required.

#### Product Overview & Comparison

Have a look at Page 3.

## Specifications

### VPN —

**L2TP** - Client and Server, RFC2661 compliant, GRE tunneling

**PPTP** - 128-bit secure Client and Server, PAP/CHAP/MSCHAPv2 authentication

**IPSec** - full peer-to-peer (initiator and responder); ESP/AH payloads; hashes HMAC - MD5, SHA-1; ciphers DES, 3DES, AES (128, 196, 256-bit); key management IKE/ISAKMP, VeriSign, Entrust, X.509v3 (PKI); IKE policies: Diffie-Hellman (to 4096-bit), RSA (to 2048-bit); pre-shared secrets; aggressive mode; X.509 certificates; PKCS, PEM; multiple sub-nets, NAT traversal, and pass-through mode. Compatible with most leading VPN products

### Firewall & Packet Filtering —

Anti-intrusion & logging; ICSA certified stateful firewall; connection tracking; rate limiting; SNAT; DNAT; packet inspection; filters/targets; routing - RIP/RIPv2/BGP/OSPF; bridging - 802.1d / spanning tree /transparent; stealth-mode; traffic shaping (QoS); UDP rate limiter

### Network Services —

DHCP client, server, relay; PPPoE client & server; connection sharing; dial on demand (all units have at least one serial port for attaching a modem); remote dial-in (not LITE2/LITE2+); DNS masquerading; dynamic DNS; DNS proxy; IP aliases; broadband to narrowband failover (via internal or external modem); timezones, NTP client; H.323 and NetMeeting

pass-through; multicast routing; channel aggregation (between WAN and serial ports)

### Management —

Easy management via any web browser (Internet Explorer, Netscape Navigator and others), http or https (SSL), SSH, multiple administrator accounts.

Windows® installer included on CD. Suitable for use with Windows® 95/98/Me/NT/2000/XP, Apple Macintosh®, Linux®, and UNIX®.

### Central Management System —

Runs on all appliances with firmware revision 1.8 or higher; SNMP based protocol; allows policy-based management; portable Java application environment

runs on Linux®, Windows® and other platforms (JRE 1.4 or higher); device grouping; asynchronous task queue; commands remote device upgrades;

**URL Content Filtering** — Optional subscription-based URL filtering & logging, transparent URL proxy, URL white list, blocking or monitoring modes, real-time URL rating, policy management, real-time reporting

**Firmware Updates** — Free lifetime downloads via the Internet

**User Limit** — Unlimited

**Approvals** — Office - all models. Home - all models except PCI630.

## Ordering information

| ITEM            | CODE          |
|-----------------|---------------|
| <b>SnapGear</b> |               |
| LITE2 .....     | .LRS9001AE-R2 |
| LITE2+ .....    | .LRS9002AE    |
| SME530 .....    | .LRS9006AE    |
| SME550 .....    | .LRS9007AE    |
| SME570 .....    | .LRS008AE     |
| SME575 .....    | .LRS009AE     |
| PCI610 .....    |               |
| PCI635 .....    |               |

## Product Overview & Comparison

| FEATURE   | Model                 |                   |                     |                 |
|---|-----------------------|-------------------|---------------------|-----------------|
|   | LITE2 / LITE2+        | SME530 / SME550   | SME570 / SME575     | PCI610 / PCI635 |
| Initial static IP address set up                    | √                     | √                 | √                   | As for PNP NIC  |
| Initial dynamic IP address set up (DHCP client)     | √                     | √                 | √                   | As for PNP NIC  |
| Connection Sharing (unlimited users)                | √                     | √                 | √                   | √               |
| Port Forwarding                                     | √                     | √                 | √                   | √               |
| NAT/Masquerading (static and dynamic)               | √                     | √                 | √                   | √               |
| DNS Caching, masquerading & proxy                   | √                     | √                 | √                   | √               |
| IP Aliases  | √                     | √                 | √                   | √               |
| DHCP client and server                              | √                     | √                 | √                   | √               |
| NTP client and server                               | √                     | √                 | √                   | √               |
| PPP / PPPoE   | √                     | √                 | √                   | √               |
| ICSA-certified Dynamic Firewall                     | √                     | √                 | √                   | √               |
| Anti-Intrusion                                      | √                     | √                 | √                   | √               |
| Logging   | √                     | √                 | √                   | √               |
| Traffic Shaping / QoS                               | √                     | √                 | √                   | √               |
| Routing   | √                     | √                 | √                   | √               |
| VPN - PPTP client and server                        | 5                     | 5                 | 20                  | 30              |
| VPNC - certified Interoperability                   | √                     | √                 | √                   | √               |
| VPN - Basic IPsec                                   | 10                    | 10                | 35                  | 70              |
| VPN - Advanced IPsec                                | √                     | √                 | √                   | √               |
| DES / 3DES Encryption                               | √                     | √                 | √                   | √               |
| PPPTP Tunnels                                       | 5 / 5                 | 20 / 20           | 20 / 25             | 25              |
| IPsec Tunnels                                       | 70 / 70               | 250 / 500         | 400 / 400           | 250             |
| Web Management                                      | √                     | √                 | √                   | √               |
| Installation Support                                | √                     | √                 | √                   | √               |
| One Year Warranty*                                  | √                     | √                 | √                   | √               |
| Optional Upgrade to Four Year Warranty              | √                     | √                 | √                   | √               |
| Dial on demand                                      | √                     | √                 | √                   |                 |
| Telnet  | √                     | √                 | √                   | √               |
| Modem Fail-over                                     |                       | √                 | √                   |                 |
| Bridging (802.1d)                                   |                       | √                 | √                   | √               |
| Administration user accounts                        |                       | √                 | √                   | √               |
| DNS -Enhanced caching, multiple DNS server proxying |                       | √                 | √                   | √               |
| R A S (dial in)                                     |                       | √                 | √                   |                 |
| AES Encryption                                      |                       | √                 | √                   | √               |
| PEM Certificate Format                              |                       | √                 | √                   | √               |
| RADIUS / TACACS+                                    |                       | √                 | √                   | √               |
| Hardware Cryptographic Acceleration                 |                       | √ (SME550 only)   | √                   |                 |
| RIP, RIPv2  |                       | √                 | √                   | √               |
| BGP   |                       | √ (SME550 only)   | √                   |                 |
| SSL / HTTPS Web Management                          |                       | √ (SME550 only)   | √                   |                 |
| SSH server & client                                 |                       | √ (SME550 only)   | √                   |                 |
| Fail-over / Load Balancing                          |                       |                   | √                   |                 |
| IDS (Intrusion Detection)                           |                       |                   | √ (SME575 only)     | √ (PCI635 only) |
| Computers on LAN                                    | Unlimited             | Unlimited         | Unlimited           | Unlimited       |
| Ethernet Ports                                      | 2 / 5 (4-Port switch) | 2                 | 3                   | 1               |
| WAN Interface                                       | 1 x 10 Mbps           | 1 x 100 Mbps      | 2 x 100 Mbps        | 1 x 100 Mbps    |
| LAN Interface                                       | 100 Mbps              | 100 Mbps          | 100 Mbps            | 100 Mbps        |
| Firewall Performance                                | 7 Mbps / 7 Mbps       | 35 Mbps / 35 Mbps | 140 Mbps / 140 Mbps | 95 Mbps         |
| PPTP RC4 (128-bit) Performance                      | 1 Mbps / 1 Mbps       | 5 Mbps / 5 Mbps   | 10 Mbps / 10 Mbps   | 10 Mbps         |
| IPsec 3DES (168-bit) Performance                    | 0.5 Mbps / 0.5 Mbps   | 3 Mbps / 10 Mbps  | 20 Mbps / 20 Mbps   | 6 Mbps          |
| Flash (MB)  | 2 MB                  | 4 MB / 8 MB       | 8 MB / 16 MB        | 4 MB / 16 MB    |
| RAM (MB)  | 4 MB                  | 16 MB             | 16 MB / 64 MB       | 16 MB / 64 MB   |