



Clavister SG4500 Series Product Sheet

Introducing Clavister SG4500 Series

The Clavister Security Gateway 4500 Series is a set of turnkey, Firewall/VPN and Unified Threat Management (UTM) network security products designed for medium and large-size enterprises and service providers that require 10 Gigabit Ethernet, high performance, excellent scalability and robustness. Based on the same award-winning technology found in all Clavister products, the Clavister SG4500 Series is designed to maximize high performance of firewall and VPN traffic.

- Two 10GbE Interfaces (SFP+)
- Stateful Firewall
- Deep Packet Inspection
- Supports both IPv4 and IPv6
- Built-in VPN - IPsec and SSL
- Intrusion Detection & Prevention (IDP)
- Web Content Filtering / Anti-Virus / Anti-Spam
- SIP/VoIP Support
- Traffic Management
- User Authentication
- Server / Route Load Balancing
- High Availability Clustering
- High Performance Solution
- Flexible Interface Options
- Redundant PSU / Fan Support
- Centralized management

Challenges in the Large Enterprise Network

The threats to the network grow more prevalent and destructive, securing the infrastructure is critical to maintaining a viable business. Attacks come from multiple sources in a variety of forms and policies are always changing. At the same time, enterprises must ensure that the security solutions do not become network bottlenecks before it is too late. To address this answers to the following challenges are crucial.

Connectivity

The large enterprise networks have become more complex than ever before and many network setups need a superior bandwidth to handle the usage of online and heavy applications that are being deployed. Support for Gigabit networks are crucial for the large networks.

Robustness and Resilience

In addition to cutting-edge performance, a large enterprise need a network that is built for robustness and great resilience to be able to have availability scenarios of 99,999%. The cost involved not having this as a requirement on the network can be crucial for a large enterprise.

Security

The attacks against large enterprises have become more sophisticated and are often targeted at the weakest link in the organization. To be able to protect the network an advanced setup is needed to secure everything from the smallest packets to the WAN connectivity.

Manageability

The large enterprise distributed networks must communicate with each other and needs to be controlled in a centralized manner. The cost for the management of a secure large enterprise network can be exceedingly high when the involved products "doesn't speak the same language".

Clavister SG4500 Series Highlights

Clavister CorePlus

At the heart of the Clavister SG4500 Series, lays Clavister CorePlus — our in-house developed, high-performance security network operating system. Every line of code is crafted to ensure that it delivers maximum performance at all times.

Flexibility and Adaptability

Not all networks are created equally. The vast difference in network configurations requires a network security gateway to be able to accommodate these differences. Clavister SG4500 Series gives you the freedom to set routing policies with extreme granularity. A large number of parameters can be used to construct policy roles to meet even the most demanding network installation.

Big on Performance - Low on Maintenance

Clavister SG4500 Series share a common trait with all other Clavister products with its support for Clavister Service Provisioning Network (CSPN). This high-speed network ensures that the Security Gateway is always up-to-date and it gives system administrators the freedom to concentrate on running their network.

Management Options

Regardless if you choose a centralized management solution, if you use the built-in web-based management solution or if you use the command-line interface, the Clavister SG4500 Series products and services are managed in the same way.

Rich on Security

By integrating best-in-class Intrusion Detection and Prevention (IDP), Anti-Virus, Anti-Spam and Web Content Filtering with a stateful firewall with deep packet inspection, IPsec and SSL VPN connectivity, the Clavister SG4500 Series is able to protect your organization against everything from network layer attacks to application layer threats.

Low Total Cost of Ownership

With our unique combination of integrated security features, award-winning service and support, and its powerful administration system provide the best possible price/performance ratio with a low Total Cost of Ownership (TCO).

Clavister SG4500 Series Specifications

Performance	Clavister SG4500	Clavister SG4500 Pro
Firewall Performance (Mbps)	5,000	10,000
VPN Performance (Mbps)	1,000	2,500
Concurrent Connections	3,000,000	5,000,000
Concurrent VPN Tunnels (SSL/IPsec)	3,000/3,000	10,000/10,000
Virtual Interfaces (VLAN 802.1q)	256	1024
Virtual Routers	100	500
Packets / Second (Firewall/VPN PPS)	1,400,000/500,000	
Ethernet Interfaces	2 x SFP+ - 10GbE Interfaces, 2 x SFP - GbE Interfaces (Small Form-factor Pluggable(Plus)), 6 x 10BASE-T/100BASE-TX/1000BASE-T	
Features		
Mode of operations	Layer 2 Mode (Transparent/Route Mode) Policy-Based NAT/PAT Policy-Based Server Load Balancing Virtual IP	
Routing	Static Routing/Source-Based Routing Policy-Based Routing (PBR) OSPF/OSPF over VPN Multicast – IGMP GRE	
Application Layer Gateways	FTP/TFTP SIP/H.323 with NAT/SAT Support HTTP SMTP/POP3	
User Authentication	LDAP Authentication (Multiple) External RADIUS Database servers RADIUS Accounting CHAP PAP Web-Based Authentication Configurable HTTP/HTTPS Front-End xAuth VPN Authentication MAC Address Authentication	
Firewall	Stateful Firewall Deep Packet Inspection Network Attack Detection/Prevention DoS and DDos Detection/Prevention TCP Reassembly	
High Availability	Firewall and VPN State Synchronization Device Failure Detection Dead Link Gateway and Interface Detection Route/Interface Failover Average Failover Time (< 800 ms)	
Virtual Private Network (IPsec)	Encryption (AES, 3DES, DES, Blowfish, CAST-128) Authentication (SHA-1, MD5) IKE Modes (Main, Aggressive) Perfect Forward Secrecy/DH Groups (1, 2, 5) X.509 Certificates Pre-Shared Keys Self-Signed Certificates IPsec NAT Traversal (NAT-T) IPsec Tunnel Keep-Alive L2TP Client L2TP Server (LNS) PPTP Client PPTP Server (PNS) VPN Policy Selection Through (Firewall Rule Set, Routing, PBR)	
IPv6 Support	Ethernet and VLAN interfaces (Static IPv6 Address Assignment) IP Rules (ALLOW, DROP and REJECT) Neighbor Discovery IPv6 Routing/Policy-Based Routing ICMPv6	
IP Address Assignment	Static DHCP Client (Server & Relay) Proxy ARP PPPoE	
Log Monitoring	Syslog Support Log Export (CSV) 1 Real-Time Performance Monitoring SNMP	
Traffic Management	Policy-Based Bandwidth Management Guaranteed Maximum Bandwidth Dynamic Bandwidth Balancing Priority Levels	
Intrusion Detection and Prevention	Stateful Pattern Matching Protocol/Rate Anomaly Insertion/Evasion Protection Dynamic IP Blacklisting Automatic Signature Updates Stateful Signatures Component-Based Signatures Application Blocking	
Security Management	Clavister InControl Support 1 Clavister Web Management Local Console (RS232/SSH) Command-Line Remote Management Remote Fail-Safe Operations	
Virtual Private Network (TLS/SSL VPN)	One-Time Client Installation Browser Independent VPN Policy Selection Through Firewall Rule Set Routing PBR	
Content Security	Web Content Filtering - Audit/Blocking Mode Classification Categories (32) URL Whitelisting/Blacklisting Anti-Virus - Stream-Based Signatures Automated Signature Updates Per Devices Signature Service Anti-Spam - DNS Blacklisting	
Hardware		
Form Factor	1U (19" rack-mountable unit)	
Dimensions	440 mm W x 44,4 mm H x 500 mm D (17,32" W x 1,73" H x 19,69" D)	
Weight	9,0 kg (19,84 lbs)	
Power Supply	Up to two (2) redundant, hot-swappable PSU, one (1) is included; 100V-240V, 47 to 63 Hz AC	
Power Consumption / Heat Dissipation	101 W (single PSU) 127 W (dual PSU) / 345 BTU (single PSU) 434 BTU (dual PSU)	
Mean Time Between Failure (MTBF)	324,000 hours (with two (2) redundant PSU)	
Cooling System	Three (3) redundant, hot-swappable fans	
Operating temp / Relative humidity	0° to 45° C (32° to 113° F) / 20% ~ 95%, non condensing	
Safety / Approvals and compliance	UL, CE / FCC Class A, CE Class A, VCCI Class A	
Warranty	The Clavister SG4300 Series come with a two (2) years standard RMA warranty and ninety (90) days Software maintenance covering all major and minor software releases counting from the earlier date of Product registration or ninety (90) days following shipment.	

About Clavister

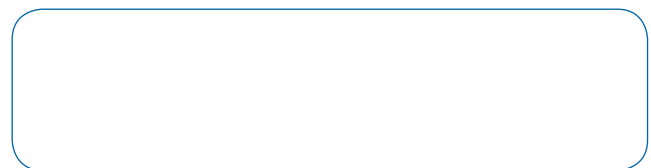
For over a decade, Clavister has been delivering leading network security solutions, providing commercial advantage to businesses worldwide. The Clavister family of Carrier Telecom Security Systems, unified threat management (UTM) appliances and remote access solutions provide innovative and flexible network security with world-class management and control. Clavister is a recognized pioneer in virtualization and cloud security. This complements its portfolio of hardware appliances delivering customers the ultimate choice of network security products. Clavister products are backed by Clavister's award-winning support, maintenance and training program.

To learn more, visit www.clavister.com.

Where to buy?

Sales Offices

www.clavister.com/about-us/contact-us/worldwide-offices



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