



Clavister 6000 Series Product Data Sheet

- Modular Solution for Premium Flexibility
- Carrier-Grade Resilience
- Built Around ATCA for 99.999% Availability
- Hot Swappable Components
- Targeted for Mission-Critical Network Applications
- Supports both UTM and SSL VPN
- Supports UMA/GAN*, PicoCell*, FemtoCell* and IWLAN*
- Fully UMA/GAN Compliant Tunnel Terminating Gateway*
- Extreme UMA/GAN Subscriber Density*
- Future-Ready Platform

* Requires Clavister CorePlus operating system for Telecom (sold separately)

Introducing Clavister 6000 Series

For some organizations, reliability, robustness and resilience are key factors for running a successful business. For data centers or telecom operators it is paramount that their systems are operational at all time. Even if there is a hardware failure or technical disruption, the systems must continue to service its customers. Failure to do so be a costly affair; financially as well as in loss of credibility.

The Clavister 6000 Series is our most comprehensive and flexible solution ever, targeted towards data centers, telecom operators and large enterprises, and with a strong focus on reliability, robustness and carrier-grade resilience. The 6000 Series is module-based and offers unparalleled flexibility and scalability, and a wide set of configuration options, including running a full set of UTM functionality and SSL VPN functionality in the same chassis.

Chassis

The Clavister 6000 Series is built around a carrier-grade Advanced Telecommunications Computing Architecture (ATCA) security chassis; the Clavister 6300 chassis (SC6300), which offers a world-class security infrastructure with multi-gigabit performance. Each Clavister SC6300 chassis can accommodate up to four processing blades and two switch fabric blades, offering customers the option to run a mix of UTM/VPN/firewalling and SSL VPN/Multi-Factor Authentication in one single chassis.

Processing Blades

Accompanying the SC6300 chassis is a number of processing blades; the Clavister Security Gateway (SG6010) ATCA blade offering UTM/VPN/firewalling and the Clavister Secure Access Gateway (SAG6040) ATCA blade offering SSL VPN/Multi-Factor Authentication.

Clavister SG6010 is packed with Unified Treat Management (UTM) features, such as anti-virus, anti-spam, web content filtering, intrusion detection and prevention (IDP), stateful firewall with deep-packet inspection, VPN, flexible routing and advanced traffic management. Alternatively, the Clavister SAG6040 offers SSL VPN functionality with Multi-Factor Authentication, Single Sign-On (SSO) and secure application delivery.

Management Options

Clavister offers you a wide range of management options to manage your Clavister 6000 Series. Regardless if you choose a centralized management solution or use the built-in web-based management solution, all Clavister Security Gateways Series products and services are managed in the same way.

Clavister InControl

Clavister InControl offers a comprehensive centralized management solution that will assist and help you perform daily tasks faster, easier and more streamlined. Its intuitive user interface and support for task-driven workflow management will guide you through complex and repetitive tasks, thus alleviating the burden of managing large installations.

Clavister Web Management

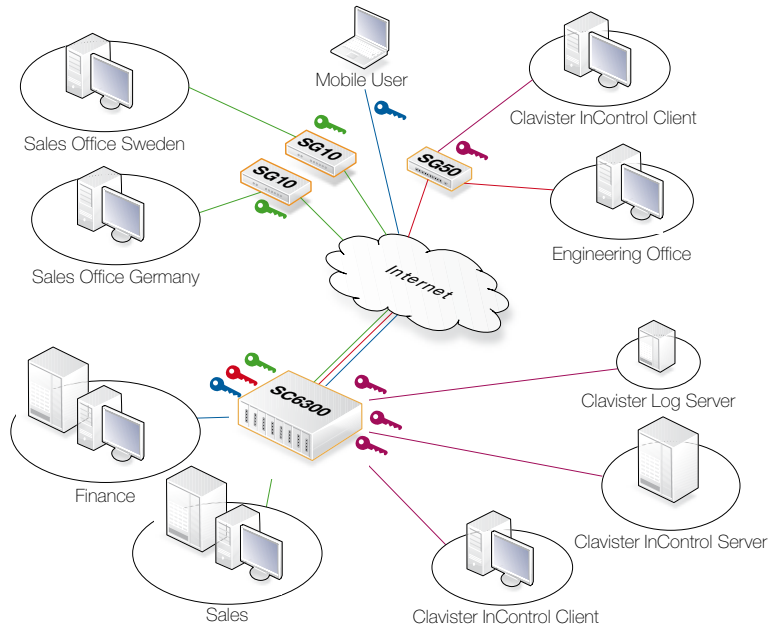
Clavister Web Management is an easy to use Web-based administration interface, which greatly simplifies product deployment.

Command-Line Interface

All Clavister Security Gateway Series products also support a comprehensive command-line interface. It is a powerful tool for anyone who wants to build custom administration interfaces.

Connectivity

The Clavister 6000 Series can handle a massive amount of I/O. The new Clavister Switch Fabric (SF6090) blade is equipped with 5 external 10 Gigabit XAUI ports and 4 external 1 Gigabit SFP. Internally the SF6090 incorporates a 20-port 10GE switch and a 24-port 1GE Ethernet switch interconnecting all the blade slots. The SF6090 blade is responsible for handling shelf and system management duties. Each SC6300 chassis requires one SF6090 blade which is included as part of the SC6300 chassis bundle. If you require more connectivity, it is possible to purchase an optional SF6090 blade for unparalleled I/O connectivity and redundancy.



Typical network scenario featuring Clavister 6000 Series

Features and Benefits

Carrier-grade resilience – redundancy is inherent in the core design, including power, control and connectivity. The SC6300 chassis carries dual redundant -48 VDC/-60 VDC power supplies as required by the PICMG 3.0 specification. Rigid certification and standardization ensures carrier grade 99,999% availability, which is needed in mission critical networks.

Support for UTM/VPN/firewalling and SSL VPN/Multi-Factor Authentication – the Clavister 6000 Series is module-based and it is fully possible to equip the Clavister 6300 (SC6300) chassis with both Clavister Security Gateway (SG6010) blades and Clavister Secure Access Gateway (SAG6040) blades for a fully redundant system. The SC6300 chassis accepts up to four processing blades.

Unprecedented scalability – the Clavister 6000 Series comes with an unprecedented scalability; support for several processing blades offering best-in-class functionality and a vast number of connectivity options. This scalability and flexibility allows customers to tailor the Clavister 6000 Series to match their exact requirements now and in the future.

Future-proof architecture – the Clavister 6000 Series is built around the ATCA specification which guarantees the latest in high speed interconnect technologies, next generation processors and improved reliability, manageability and serviceability. Clavister will continue to release new options and blades for the Clavister 6000 Series.

Premium platform for UMA/GAN – the Clavister 6000 Series is a premium platform for running the unique requirements pertaining to fixed and mobile networks, such as Unlicensed Mobile Access (UMA) or Generic Access Networks (GAN), IWLAN, PicoCell and FemtoCell. This is possible to do by utilizing a Telecom optimized version of Clavister's award-winning network security operating system – the Clavister CorePlus.

About ATCA

ATCA is a set of documents specifying all the electrical and mechanical requirements necessary to create an industry standard platform. This documentation includes specifications for platform elements such as chassis dimensions, backplane properties, module size and backplane interface specifications, power rating, cooling, etc.

The main objectives of the ATCA standard is to enable building carrier grade convergent systems. Specifically, it is aimed at converging telecom access and edge equipment functions with data center and storage equipment functions in a modular fashion.

Some of the key guiding principles of the ATCA standard are:

- scalable capacity of up to 2.5 Tbps (per chassis)
- redundancy throughout the system configuration to achieve over 99.999% availability (Carrier Grade)

The ATCA specifications incorporates the latest trends in high speed interconnect technologies, next generation processors, and improved Reliability, Availability and Serviceability (RAS). For more information about ATCA, please visit: www.picmg.org

Expansion Options

With Clavister 6000 Series, customers have a high performance, high-availability security platform for mission-critical applications that is future-ready for upcoming Clavister products, such as new processing blades, Advanced Mezzanine Card (AMC) processing options and future versions of our security network operating system.

Complete Security Solution

Clavister 6000 Series offers data centers, large enterprise and telecom operators the ultimate security solution, both in terms of flexibility and scalability, as well as unprecedented robustness and resilience. Enabling customers to mix both UTM/VPN/firewalling and SSL VPN/Multi-Factor Authentication in a single ATCA chassis, thus creating a strong offering for data centers, large enterprise and telecom operators.



Clavister 6000 Series Processing Blade Specifications

	Clavister Security Gateway (SG6010)	Clavister Secure Access Gateway (SAG6040)	Clavister Switch Fabric (SF6090)
Performance Specifications			
Firewall Performance (Gbps)	4	n/a	n/a
VPN Performance (Mbps)	300	n/a	n/a
Concurrent Users	n/a	Support for up to 2000 concurrent users	n/a
Hardware			
Form Factor and Dimensions	8U x 6HP x 280mm ATCA, single slot		
Ethernet Interface	Dual 10BASE-T/100BASE-TX/1000BASE-T		n/a
Ethernet Fabric (PICMG 3.1)	10GBASE-BX4, 1000BASE-BX		n/a
Base Interface Links	n/a	1GE links to 14 slots	
Base Up/Cross Links	n/a	1 10GE XFP (front) and 3 1GE SFP (front) or 6 GE SFP to rear	
Fabric Interface Links	n/a	XAUI to 14 slots	
Fabric Up/Cross Links	n/a	4 10GE XFP to front and 4 1GE SFP to rear	
Power	200 W (maximum)		
Environmental			
Ambient temperature	+5° to +45°C (operating), -40° to +70°C (non-operating)		0° - 55°C (operating), -40° - 70°C (non-operating)
Humidity, non-condensing	5 - 85% (operating), 5 - 90% (non-operating)		5 - 90% (operating), 5 - 90% (non-operating)
Regulatory Approvals			
Safety	UL/EN/IEC 60950-1, CSA 22.2		
EMC	FCC Part 15, Class B, EN 55022: 2006, Class B EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8		

Specifications subject to change without further notice.

NOTE: For product license options and support options, please visit: www.clavister.com or contact your local Clavister Sales Representative.

Clavister 6000 Series Chassis Specifications

	Clavister Chassis (SC6300)
Hardware Specification	
Available Slots	4 Processing Slots 2 Switch Fabric Slots (slot 1 & 2)
High Availability Backplane	Built-in, supports Full Mesh
Form Factor	5U rack-mount
Dimensions	17.625" W (19" rack mount) x 8.72" H x 17.877" D (447.675 mm x 221.49 mm x 454.08 mm)
Weight	41 lbs (18.6 kilogram)
Compliance	PICMG 3.0 R2.0
Power	
DC Input (Nominal)	-48 VDC/-60 VDC
Redundancy	Dual redundant PEM modules, either capable of supplying 100% of shelf power
Environmental	
Operating temperature	Normal: +5° to +45° C (+41 F to +113 F) Short Term: -5° to +55° C (+23 F to +131 F)
Humidity	5% ~ 95%, non condensing
Regulatory	
Safety	UL, cUL, TUV, CE
EMC	Designed to meet FCC class A
Environment	Compatible with NEBS and ETSI
Warranty	Clavister System Chassis 6300 (SC6300) come with a two (2) years standard RMA warranty and ninety (90) days Software Subscription covering all major and minor software releases counting from the Start Date. Start Date means the earlier of Product registration or ninety (90) days following shipment from Clavister.

Specifications subject to change without further notice.

NOTE: For product license options and support options, please visit: www.clavister.com or contact your local Clavister Sales Representative.



About Clavister

Since 1997, Clavister has been delivering leading network security solutions, providing commercial advantage to tens of thousands of businesses worldwide. The Clavister family of unified threat management (UTM) appliances and remote access solutions provide innovative and flexible network security with world-class management and control.

Clavister has pioneered virtual network security, and this along with its portfolio of hardware and software appliances gives customers the ultimate choice. Clavister products are backed by Clavister's award-winning support, maintenance and education program.

Headquartered in Sweden, Clavister's solutions are sold through International sales offices, distributors, and resellers throughout EMEA and Asia.

To learn more, visit www.clavister.com.

Clavister Contact Information

General Information
info@clavister.com

Technical Support
support@clavister.com

Partner Information
partner@clavister.com

Sales Information
sales@clavister.com

Ordering Information
order@clavister.com



WE ARE NETWORK SECURITY

Clavister AB, Sjöгатan 6 J, SE-891 60 Örnsköldsvik, Sweden

Phone: +46 (0)660 29 92 00 | Fax: +46 (0)660 122 50 | Web: www.clavister.com | Email: info@clavister.com