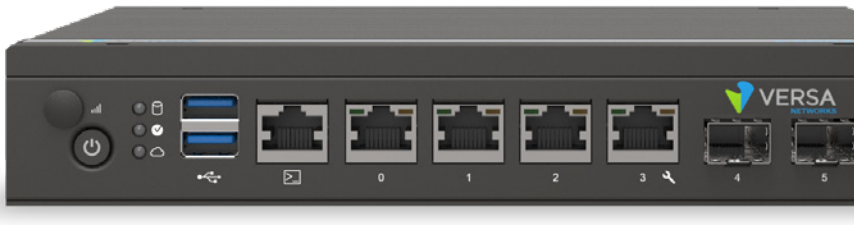
Cloud Service Gateway



CSG620h Series Appliance Datasheet

Product Overview

Versa Networks Cloud Service Gateway (CSG) 620h is a purpose-built hardened appliance offering full set of SD-WAN, NGFW, UTM/UTP, on-premises ZTNA, Device Fingerprinting, IoT security and uCPE capabilities for deployments that require hardened appliances.

CSG620h targets deployments in stationary environments that require physical and temperature hardening such as power utility facilities, substations, factories, highway and transportation infrastructure enclosures, and various other critical field environments. Deployment examples can span across a broad set of stationary deployment which are not environment controlled including power, oil and gas utility facilities, infrastructure monitoring stations, field service buildings and more.

CSG620h comes with dust resistance, physical hardening, broad temperate range and small physical form factor characteristics. CSG620h delivers physically resilient security and connectivity capabilities to enable secure networking for such harsh field sites.

CSG620h provides wired connectivity via its built-in copper GE and SFP+ 10/1GE optical ports, giving different wired connectivity options to our customers. Wireless WAN connectivity is provided via embedded LTE Advanced Pro CAT12 module with high performance over the air.

Versa CSG620h runs VOS™ (Versa Operating System) natively and is managed by Versa's centralized orchestration software Versa Concerto and Versa Director. Versa's big data-base application Versa Analytics, provides deep analytical insight views on performance, application, security events, users and IoT devices in real time and historical basis.

Versa CSG620h Advantages

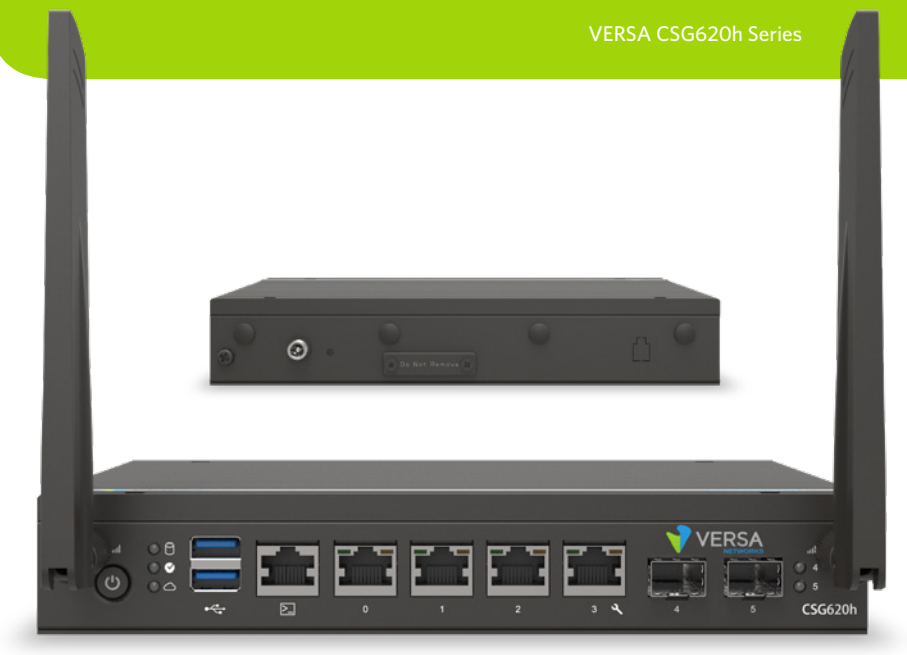
Versatility and Flexibility

CSG620h is an innovative industrial appliance which runs VOS natively delivering multi-tenant enterprise grade networking solution implemented in combination of software and hardware. CSG620h includes networking features like Layer-2 bridging, Layer-3 routing (IPv4, IPv6, unicast and multicast), NAC/802.1X, macro/micro-segmentation, SD-WAN, CGNAT. Together with above mentioned networking features, CSG620h offers built-in User and Device authentication, on-premises ZTNA, full spectrum of on-premises NGFW, UTM/UTP class security features run natively, allowing our customers to benefit from such broad set of features using a single hardened appliance. Please see VOS datasheet for complete list of features that VOS offers.

The powerful processor used within CSG620h provides high performance branch connectivity and natively integrated security to the site or to the facility. CSG620h's performance and scaling capacity caters for up to medium to large field branch site capacities, giving the opportunity for our customers to standardize deployments with single hardened appliance. See performance and scaling table below for more details.

LTE Advantages

Today, LTE based connectivity is ubiquitously available. CSG620h uses high performance, CAT12 LTE modem to provide high throughput connectivity to users or devices on site. CSG620h with VOS natively running uses LTE connectivity as primary or backup connection such that even if underlying wired network connectivity fails, CSG620h can still provide uninterrupted wireless network connectivity to site and its network infrastructure.



CSG 620h series Front View and Back View

CSG620h appliance has externally accessible SIM card slot mapping to the embedded modem allowing our customers use the SIM card of their carrier of their choice.

Embedded LTE modem uses 2 standard SMA connectors for antenna connectivity. CSG620h units come with on appliance mountable LTE antennas in its packaging. Optionally, LTE antennas connected with extenders can be used with CSG620h units. The option to support such antenna extenders will come handy especially when CSG620h is deployed in metal enclosures which filter much of LTE signal out. In such cases, antenna extender cables can be used to connect to LTE antenna that are installed at the outside of metal enclosure to provide wireless connectivity while the appliance is located within the metal enclosure.

Please see here for more details on the LTE module. If you are looking for indoor or outdoor antenna extenders, Versa sales rep can also help you with qualified antenna extenders. For more details on external LTE antennas see here.

Intelligent Traffic Management

Versa SD-WAN employs intelligent traffic management, load distribution, application traffic prioritization, intelligent congestion management mechanisms to manage the user and application traffic for best outcomes.

VOS's intelligent traffic management features such as TCP Optimization, FEC, Packet cloning assure delivery of mission critical traffic across lossy links. Embedded CODECs will help analyze voice, video and UC flows with quantitative measurements which then gets reflected as MOS scores for each flow and used for achieving best user and application experience thanks to VOS's built-in MOS based automated traffic management capabilities.

VOS's intelligent traffic management capabilities are available on CSG620h across its wired and wireless (LTE) WAN connections to provide best connectivity experience to users and devices located in field sites. VOS is aware of LTE connections and VOS's intelligent traffic management capabilities over LTE connections include adaptive probes, LTE traffic management for data quota,, making selective use of LTE links for important traffic or for traffic of choice. One of such capabilities of VOS includes so-called tunnel-less SD-WAN which is developed to minimize SD-WAN tunnel overheads to make most use of LTE and/or satellite connection bandwidth. Please refers to Versa's publicly available documentation for more information on such intelligent traffic management capabilities of VOS.

Device Fingerprinting / Identification and IoT Security

VOS's market leading device fingerprinting and identification engine runs inline to the traffic to analyze traffic flows generated by each network attached device to identify the network attached device and to gain insights into the activity of the applications and resources accessed over your network. Using its regularly updated device database, Versa's device fingerprinting solution identifies over a million different types of network attached devices, maps them to different device categories and allows network operators to place these devices into different macro or micro segments.

Once a network attached device is identified, classified and segmented, it can easily be secured, thanks to VOS's built-in powerful security stack. Most fundamentally, Versa's platform extends on-premises Zero Trust security to "things", applying least privilege access to even "client-less" devices while dynamically reevaluating their security posture.

Furthermore, VOS supports many commonly used IoT protocols to manage their connectivity and to secure them.

You can find more details on VOS's device identification and IoT Security capabilities, see here or respective solution guides and technical webpages located on https://www.versa-networks.com.

All of such capabilities of VOS are available now on CSG620h.

Built-in uCPE Functionality to host 3rd party VMs

CSG620h appliance can also host 3rd party software in the form of VMs (virtual machines). This capability is called uCPE. uCPE eliminates the need to purchase or deploy specialized hardware or compute modules. VOS's uCPE capabilities enables appliance consolidation, further simplifying deployments in the field.

Versa's uCPE solution uses hardware assisted service chaining of VOS to hosted 3rd party VMs using L2 or L3 service chains. 3rd party VMs and associated service chains can be deployed in fully automated form thanks to centralized orchestration capabilities provided by Versa Director. Versa's uCPE solution supports rich set of pre-qualified VMs and in addition, our customers can bring in their VMs as long as they support standard VM interfaces and form factors. You can find more information about Versa uCPE on https://docs.versa-networks.com.

Resiliency Advantage

CSG620h appliances are designed as fanless appliances to maximize resiliency and durability to ensure business continuity in demanding field environments. Thanks to its fanless design, careful selection of parts for longevity and its hardened characteristics, CSG620h can be deployed for long life, minimizing technician visits on site.

The use of fanless design enables deployments in environments with dust and other adverse characteristics.

Secure Platform Advantages

CSG620h appliance has been designed with security built-into hardware. CSG620h appliances come with secure BIOS and secure boot capabilities. Integrated TPM chip ensures integrity and security of critical factory installed data. VOS supports FIPS compliant mode of operation, providing additional secure modes of deployment or operations.

Mounting and Deployment Options

CSG620h appliances support desktop and DIN mounting.

Scaling and Performance

CSG620h's expected throughput values for different scenarios are as follows:

	CSG620h
Routing, Stateful Firewall, CGNAT	4,000 Mbps
SD-WAN DIA, NGFW DIA	3,100 Mbps
SD-WAN site to site	1750 Mbps
NGFW + SD-WAN	1350 Mbps
NGFW + AV	600 Mbps

	CSG620h
NGFW + AV + SD-WAN	500 Mbps
NGFW + IPS	475 Mbps
NGFW + IPS + SD-WAN	350 Mbps
NGFW + UTM/UTP	300 Mbps
NGFW + UTM/UTP + SD-WAN	225 Mbps

(*) Performance and scaling numbers shared in product datasheets can vary from vendor to vendor depending on testing scenarios and testing methods utilized. Versa references real-life based scenarios for its performance testing. Furthermore, Versa's security functions run by default in high-security mode and performance numbers shared above are obtained in the same mode to provide best guidance to its customers. For details on each test scenario including running security functions in alternative mode such as higher performance mode, please contact Versa reps.

Hardware Specifications

	CSG620h	CSG620h-LG
Wired Interfaces	4 X GE ports + 2 x 1/10 GE SFP+ ports	
Wireless Interfaces	Base model	Advanced LTE Pro (CAT12) module
Management	1x RJ45 RS232 console, 1x RJ45 GE management Ethernet	
Other Interfaces and Modules		
TPM	Yes, TPM2.0	
Crypto Acceleration	Via built-in hardware accelerators	
USB	2 x USB 3.0 type A connectors	
Physical Characteristics		
Unit Weight	5.1 lbs (2.3Kg)	
Unit Dimensions	8.7" x 6.3" x 1.7" (220 X 160 X 44 mm)	
Chassis	Iron chassis with aluminum cooling fins on top	
IP rating	IP40	
Cooling	fanless	
Unit Power	AC to 12VDC via shipping 36W power adaptor 12VDC power in input on the unit Optionally a DC-DC converter is offered for deployments in environments that provide >12VDC	
Operational and Compliance		
Operational Temperature	-20C to 70C	
Storage Temperature	-40C to 70C	
Humidity	10-85%	
FCC Classification	FCC Part 15, Class A, IP40	
Environmental	ROHS	
Safety	CE Marketing	
Regulatory	FCC (US), CE (EU), CB (IEC)	

Warranty and Support

Versa Cloud Services Gateway CSG620h appliance includes a 2-year Return to Factory (RTF) Warranty. Versa Networks offers enhanced warranty and advanced replacement options such as Next Business Day or Same Day which can be ordered with the hardware. For more details, please refer to the Versa Cloud Services Gateway Ordering Guide. Versa CSG620h platform is certified and available to our customers via Versa's globally extensive distribution network.

Ordering Guide

Versa Cloud Services 620h appliance is a versatile platform providing a variety of optional capabilities to suit the needs of in vehicle use cases. Please refer to the ordering guide.

About Versa Networks

Versa Networks the leader in SASE offers fully featured SD-WAN with integrated NGFW/UTP, ZTNA, advanced scalable routing, genuine multi-tenancy, big-data based analytics and the latest AI-ML technologies as part of its single stack software solution. Versa Networks is privately held and funded by Sequoia Capital, Mayfield, Artis Ventures, Verizon Ventures, Comcast Ventures, Liberty Global Ventures, and Blackrock Ventures.

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