

Data Sheet

VeloCloud SD-WAN™, by Arista a fundamental component of VeloCloud SASE™, offers converged cloud networking and security services to achieve flexibility, agility, and scale for enterprises of all sizes. VeloCloud SD-WAN is built on software-defined networking principles to address end-to-end automation, application continuity, branch transformation, and security from the edge to the data center and the cloud.

VeloCloud SD-WAN provides availability and quality-of-service for modern applications, while delivering security and ubiquity of access for the distributed workforce. Our SD-WAN and SASE, built on the VeloRAIN (Robust AI Networking) architecture are ideal for today's distributed enterprises embracing cloud, GenAI, and application transformation.

VeloCloud SD-WAN addresses the distinct needs of AI and non-AI based applications as it relates to performance, security, and scalability. As a cloud-delivered solution, VeloCloud SD-WAN ensures resilient WAN connectivity and allows users to have flexible WAN choices, such as broadband, MPLS, LTE, and satellite. VeloCloud SD-WAN offers high application performance and availability while lowering networking costs. It can detect the slightest degradations and dynamically remediate over one or multiple WAN links, resulting in a highly satisfied user experience. While most enterprises deploy SD-WAN hardware appliances at their branch locations, a software-based remote client is also available as an extension of VeloCloud SD-WAN. Moreover, Enhanced Firewall Service is built into VeloCloud SD-WAN Edges, providing comprehensive security and eliminating the need for legacy firewalls at branch locations.

VeloCloud SD-WAN components

The VeloCloud SD-WAN solution consists of three components:

VeloCloud SD-WAN Edge

VeloCloud SD-WAN Edge is an enterprise-class appliance providing secure and optimized connectivity to applications anywhere, on and off the cloud. It is zero-touch provisioned for secure and optimized connectivity to applications. Edge is available in various form factors: hardware, software (VMs), downloadable from cloud marketplaces, or Virtual Network Functions (VNF), with hardware appliances most widely deployed at customer branch sites.

Edge automatically aggregates multiple links and steers traffic over the optimal links based on Dynamic Multipath Optimization™ (DMPO) and deep application recognition (DAR). VeloCloud SD-WAN Edge supports high availability (HA) deployment models and can easily integrate into an existing network.

Edge also offers an Enhanced Firewall Service, which includes functions such as IDS/IPS, URL filtering, and malicious IP filtering. This additional layer of security serves as a barrier between a private network and the public Internet, and is crucial for protecting branch sites from unauthorized access and threats.

VeloCloud SD-WAN Gateways

Gateways optimize data paths to all applications, branches, and data centers, along with the ability to deliver network services to and from the cloud. VeloCloud's distributed, global network of gateways, hosted by VeloCloud/service providers or deployed on-premises, provides scalability, redundancy, and on-demand flexibility.

Gateways implement DMPO, cloud VPN, and VeloCloud SD-WAN Multisource Inbound Quality of Service between global cloud services (SaaS or laaS) and each VeloCloud SD-WAN Edge, enabling broadband and private leased lines to appear as a single, high-performance WAN connection.

VeloCloud Orchestrator

Orchestrator is a cloud-hosted (or on-premises) central management tool for VeloCloud SD-WAN, by Arista. Its web-based user interface (UI) provides simplified configuration, provisioning, monitoring, fault management, logging, and reporting functions. Orchestrator enables flexible implementation of business-based policies for application delivery and traffic management.



Software Features

Category	Features
AAA	RADIUS, local authentication and authorization, multitenant 3 Tier RBAC architecture, auditing, roles and privileges
Availability	High availability* for VeloCloud SD-WAN Edge, disaster recovery for VeloCloud Orchestrator, multilink for high availability of WAN Edge clustering
Configuration and monitoring	REST API, SDK (Java and Python), Syslog, SNMP, NetFlow, 4,000+ applications/categories, ANPM, application usage, device identification, live mode, zero IT touch activation, per-flow visibility
Deployment flexibility	Eliminate pre-stage, no CLI, group policies, consolidated ICOM and end customer dashboard, VNF form-factor, multitenant stateless headend, transport group for business policy abstraction, application-aware service insertion on premises or in cloud, RMA workflow, customized application maps
Dynamic Multipath Optimization	Application and network condition aware sub-second steering, jitter/loss correction, fast intelligent routing, intelligent gateway selection, link aggregation, TCP flow optimization, unidirectional link measurements, bandwidth detection
Multitenancy	VeloCloud SD-WAN Controller, VeloCloud SD-WAN Gateway, VeloCloud Orchestrator
Network services	IPv4, IPv6, DNS, DHCP client, DHCP server, DHCP relay, NAT
QoS	Shaping, policing, per-flow queueing, tunnel shaper, multi-source inbound QoS, rate-limiter, COS aware, outer/inner DSCP tagging, smart defaults, MPLS COS
Remote troubleshooting	Live mode, alerts, events, remote diagnostics (examples: DNS test, ping test, flush active flows, list active flows, paths, VPN tests, packet capture, etc.), PKI infrastructure with certificate management workflows, diagnostic bundles
Routing	OSPF, BGP, static, connected, ICMP probes/responders, overlay flow control, per-packet application aware steering, route filter, route redistribution
SaaS/laaS	Improved performance for cloud apps, supports well-known laaS (e.g., AWS, Azure, GCP), Security Service Edge (e.g., Check Point, Zscaler, Palo Alto Networks, Netskope, Menlo Security, Websense, OpenDNS)
Cloud providers	AWS, Azure, GCP, Alibaba, VMware Cloud on AWS, Azure VMware Solution. Performance data available upon request
Security	AES 256/128, SHA1/SHA2, IKEv2, VPNC compliant IPsec, PKI, segmentation, TLS1.2, SCEP, firewall L2-7, 1:1 NAT, port forwarding, dynamic branch to branch, MAC filtering Security service Insertion capabilities include simplified service insertion of third-party NGFW running locally on Edge VNF, and simplified cloud-based NGFW, AV, IPS/IDS, threat-detection service insertion Protects users and infrastructure accessing SaaS and Internet apps from threats, at the same time providing visibility and control with VeloCloud SASE, secured by Symantec
Enhanced Firewall Service	Advanced firewall features including Intrusion Detection and Prevention (IDS/IPS), URL Filtering, Malicious IP Filtering, and security monitoring
Hosted firewall logging	A hosted logging infrastructure on the cloud is provided to customers to capture and store firewall logs received from Edges

Software Features

Category	Features				
Security monitoring dashboard	The "Security Overview" screen (VeloCloud Orchestrator UI > Monitor > Security Overview) displays real-tile security related statistics including threats detected/prevented and edge impacted/protected.				
Port security	Wi-Fi 802.1x – WPA-Enterprise (EAP-MD5, EAP-TLS), WPA-Personal 802.1x- Enterprise (EAP-MD5, EAP-TLS) - MAC address-based access (local) 802.1x is supported on both switched and routed ports MAC Address Bypass (MAB): For LAN devices that do not support 802.1x authentication, their MAC addresses can be checked against a RADIUS server				
VLAN tagging	802.1Q, 802.1ad, QinQ (0x8100), QinQ (0x9100), native				
WAN overlay support	Public/private/hybrid transport, cloud and on-premises				

Software subscriptions editions

VeloCloud SD-WAN software is based on different subscription editions with different features designed for a wide variety of use cases. They are listed below.

Features	Standard Edition	Enterprise Edition	Premium Edition
VeloCloud Orchestrator	✓	✓	✓
Dynamic Multipath Optimization (DMPO)	✓	✓	✓
Number of Edges Supported	Unlimited	Unlimited	Unlimited
Maximum Number of Data Segments	4	128	128
Maximum Number of Profiles	4	Unlimited	Unlimited
Partner Gateway Support (SP Only; SaaS access only in Premium)	√	✓	√
Virtual Services Orchestration for NGFW Deployment on Edges	✓	✓	✓
Routing Support	BGP, OSPF	BGP, OSPF, Multicast	BGP, OSPF, Multicast
Cloud Gateway to SaaS and Cloud Security Service (without tunneling)	X	X	✓
Cloud Gateway to Legacy DCs, laaS, or Cloud Security Service via Tunnels (non- SD-WAN destinations)	add-on	add-on	✓
Enhanced Firewall Service (including IDS/IPS, URL Filtering, Malicious IP Filtering)	add-on	add-on	✓
Hosted Firewall Logging	✓	✓	✓
Security Monitoring Dashboard	✓	✓	✓



Features	Standard Edition	Enterprise Edition	Premium Edition
Direct Edge to Internet/Cloud Security Service (BGP over IPsec)	✓	✓	✓
Automated Tunnel Setup via API to IaaS or Third-Party Cloud Security Service	X	from Edge	from Edge or Gateway
PCI Certified Service	add-on	add-on	add-on
Upgradeable to a Higher Edition	✓	✓	N/A
Hub Clustering	✓	✓	✓
Gateways as Cloud VPN Hub	X	x	✓
Auto VPN Setup	Hub to spoke	Hub to spoke plus dynamic B2B	Hub to spoke plus dynamic B2E
Customizable Business & Security Policy	✓	✓	✓
Path Visibility	Last-mile	Last-mile plus site-to-site	Last-mile plus site-to-site
PKI Certificate Management	Embedded certificate of authority (CA)	Embedded CA plus intermediate and external CA	Embedded CA plus intermediate and external CA
Mixed Editions	✓	✓	✓

VeloCloud SD-WAN Bandwidth Tiers

VeloCloud SD-WAN is licensed by bandwidth tier as shown in the table below:

Edge / BW	10 M	30 M	50 M	100 M	200 M	500 M	1 G	2G	10 G	40 G	100 G
Edge 710-W, 710-5G	✓	✓	✓	✓	✓	✓	X	X	X	X	X
Edge 720	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X
Edge 740	X	X	X	✓	✓	✓	✓	✓	✓	X	X

For a complete list of end-of-sale Edge models, please refer to the <u>Product Lifecycle Updates</u>.

Hardware replacement services

- Hardware edges include 1-year warranty, shipped via Return-to-base.
- A-Care Hardware and Software support SKUs available for purchase and run concurrently to the 1year warranty.

Hardware RMA Support Plans				
2-Hour Replacement	A replacement unit is delivered within 2 hours of RMA approval			
4-Hour Replacement	A replacement unit is delivered within four hours of RMA approval.			
Next Business Day (NBD)	Rapid hardware replacement is delivered by the next business day.			
Onsite Services (Add-On)	Available with Next Business Day and 4-Hours service levels			



Physical Edge models

VeloCloud SD-WAN Edge appliance models available for sale include the 7x0, 3xx0, 4100, and 5100 series. Flexible deployment options are available, including models with or without integrated Wi-Fi and models certified for sale in China.

- VeloCloud SD-WAN Edges (with integrated Wi-Fi): Please refer to the Physical Edge Specifications table below.
- VeloCloud SD-WAN Edges (without integrated Wi-Fi): These Edges have identical specifications to the integrated Wi-Fi models except they do not have Wi-Fi built in. Please refer to the Physical Edge Specifications table below. These models are denoted by the N suffix in the model's name.
- VeloCloud SD-WAN Edges with China certifications: These Edges have identical specifications to their "non-China" counterparts but include China-specific regulatory certifications and the China version of the TPM module. These are denoted by the C suffix in the model's name.

Physical Edge specifications (performance and scale)

Please note: Software release 6.1 offers optimized performance and improved efficiency. Edges must be on software code R6.1+ to achieve similar performance below.

Edge	710-W, 710-5G	720	740
Max Throughput per Edge with Routed- Mode Ports (1300B) ¹	950 Mb/s	5.2 Gb/s	7.2 Gb/s
Max Throughput per Edge with Routed- Mode Ports (IMIX) ²	395 Mb/s 350 Mb/s ⁵	2.3 Gb/s	3.5 Gb/s
Max Throughput per Edge with Enhanced Firewall Services (App Mix) ³	280 Mb/s	1.2 Gb/s	2.0 Gb/s
Max Tunnel Scale	50	400	800
Flow per Second	4000	18,000	26,000
Max Concurrent Flows	225,000	440,000	900,000
Max Concurrent Flows with Enhanced Firewall Services Enabled	110,000	220K	450K
Max Number of BGP Routes	100,000	100,000	100,000
Max Segments	32	128	128
Maximum NAT Entries	225,000	440K	900K

^{1.} Maximum performance of the Edge based on large packet (1300B) payload with AES-128 encryption and DPI turned on

Enhanced HA link performance

Edge	710-W, 710-5G	720	740
System Memory (RAM)	260 Mb/s	1 GB/s	2 GB/s

Note: Starting in release 5.2, any interface (including the 10G interface) can be used for HA

^{2.} Internet traffic (IMIX) performance based on average packet size of 417B payload with AES-128 encryption and DPI turned on Note: VeloCloud SD-WAN Edges also support clustering deployments for multi-gigabit performance.

^{3.} Performance numbers with Enhanced Firewall Services measured using TREX setup based on enterprise application mix of TCP and UDP traffic profiles.

^{4.} Performance numbers with VeloCloud Edge Intelligence are measured using a 400B payload.

^{5.} IMIX performance using AES-256 encryption



Connectivity

Edge	710-W, 710-5G	720, 740
LAN / WAN 1G RJ-45	4	No ²
LAN / WAN 2.5G RJ-45	No	6
LAN / WAN 1G SFP	1	No
LAN / WAN 1G/10G SFP+	No	2
LAN / WAN 25G SFP28	No	No
LAN / WAN 40G QSFP	No	No
Integrated Wi-Fi	Yes	No
Integrated 5G/LTE	Yes, only 710-5G	No
USB ports (3G/4G LTE)	11	21

^{1.} USB 3.0 ports

Memory, and Storage

Edge	710-W, 710-5G	720	740
System Memory (RAM)	4 GB	8 GB	16 GB
System Flash	16 GB	16 GB	16 GB
System Storage	-	64 GB	64 GB

Dimension, power, environment, and reliability

Edge	710-W, 710-5G	720	740			
Cooling	Fanless	Fan				
Mounting	Desktop,	Desktop, wall mount, 19 in. rack mount				
Size (W x D x H)	206 mm x 179.5 mm x 35 mm	44 mm x 206 mm x 230 mm				
Unit Weight	2 lb	2.6 lb				
Gross Weight	5 lb	6 lb				
Power supply		Enternal: AC				
AC input	Voltage: 100V to 240V auto-ranging, Frequency: 50 Hz to 60 Hz					

^{2. 2.5}G RJ-45 ports are backward compatible with 1G/100M/10M



Dimension, power, environment, and reliability

Edge	710-W, 710-5G	720	740	
Power load (Typical / Max)	15W/20W 20W/48W		8W	
Operating Conditions	Temperature: 0 °C to 40 °C, Humidity 5% to 85%, Altitude 5000m			
Non-operating conditions	Temperature -40 °C to 70 °C, Humidity 5% to 95%, Altitude 5000m			
MTBF1	28 years 44 years		ars	

^{1.} MTBF based on Telcordia SR-332 methodology; excludes system fans in the calculation (25 °C ambient temperature)

Hardware Accessories

Mounting brackets and rails

Edge Model	Included	Additional Options	Part Number
710-W, 710-5G, 720, 740	Wall-mount bracket	2RU rack-mount shelf	VC-EDG-RMB-P

Power adapters, cables, and guides

Edge	Power Adapter ¹ + Cable	Ethernet Cable	Quick Start Guide
710-W, 710-5G, 720, 740	•	•	•

¹ Every Edge comes with a PSU, separate or integrated.

Wireless specifications

Wireless LAN (Wi-Fi) specifications

Wi-Fi Capabilities	710-W, 710-5G		
Wi-Fi Standards	802.11 a/b/g/n/ac/ax (Wi-Fi 6)		
Frequency Bands (GHz) ¹	2.412-2.452, 5.180-5.230, 5.745-5.795		
Antenna (Maximum Data Rate)	2x2 MIMO		
Max Simultaneous SSIDs	4		
Max Transmit Power ¹	21 dBm for 2.4 GHz 20 dBm for 5 GHz		

¹ Country-dependent; frequency and power limits are set once unit is activated



Wireless WAN (3G / 4G / LTE / 5G) specifications

3G / 4G / LTE Capabilities	710-5G
Modem	Telit FN990A28
Geography	Global
LTE Category	Cat-19
Carrier Aggregation	Yes
3G Fallback	HSPA+
SIM Slots	Dual Physical SIM + single eSIM (single standby)
LTE Bands	B1, B2(B25), B3, B4(B66), B26(B5, B18, B19), B7, B8, B12(B17), B13, B14, B20, B28, B29(DL), B30, B32(DL), B34, B38, B39, B40, B41, B42, B43, B46(LAA), B48(CBRS), B66, B71
5G Bands	5G FR1 bands, n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n38, n40, n41, n48, n66, n71, n75, n76, n77, n78, n79
Antennas	Main and AUX (via SMA connectors)

Virtual Edge specifications

Private cloud (hypervisors)

Device	Maximum Throughput	Maximum Number of Tunnels*	Flows per Second	Maximum Concurrent Flows	Maximum Routes	Maximum Segments [*]
ESXi Virtual Edge (2- core, VMXNET3)	1.5 Gb/s (1300B) 900 Mb/s (IMIX)	50	2400	240,000	35,000	128
KVM Virtual Edge (2- core, Linux Bridge)	800 Mb/s (1300B) 250 Mb/s (IMIX)	50	2400	240,000	35,000	128
KVM Virtual Edge (2- core, SR-IOV)	1.5 Gb/s (1300B) 900 Mb/s (IMIX)	50	2400	240,000	35,000	128
ESXi Virtual Edge (4- core, VMXNET3)	4 Gb/s (1300B) 1.5 Gb/s (IMIX)	400	4800	480,000	35,000	128
ESXi Virtual Edge (4- core, SR-IOV)	5 Gb/s (1300B) 2 Gb/s (IMIX)	400	4800	480,000	35,000	128
KVM Virtual Edge (4- core, Linux Bridge)	1 Gb/s (1300B) 350 Mb/s (IMIX)	400	4800	480,000	35,000	128
(VM Virtual Edge (4- core, SR-IOV)	4 Gb/s (1300B) 1.5 Gb/s (IMIX)	400	4800	480,000	35,000	128
ESXi Virtual Edge (8- core, VMXNET3)	6 Gb/s (1300B) 2 Gb/s (IMIX)	800	28,800	1.9 million	35,000	128
ESXi Virtual Edge (8- core, SR-IOV)	6 Gb/s (1300B) 3 Gb/s (IMIX)	800	28,800	1.9 million	35,000	128
KVM Virtual Edge (8- core, SR-IOV)	6.5 Gb/s (1300B) 3.2 Gb/s (IMIX)	800	28,800	1.9 million	35,000	128



Edge configuration

	2 vCPU	4 vCPU	8 vCPU	10 vCPU	
Minimum Memory (DRAM)	8 GB	16 GB	32 GB	32 GB	
Minimum Storage	8 GB	8 GB	16 GB	16 GB	
Supported Hypervisors	Software version 4.0 and above: ESXi 6.5U1, 6.7U1, 7.0 KVM Ubuntu 16.04 and 18.04				
Supported Public Clouds	AWS, Azure, GCP, Alibaba				
Support Network I/O	SR-IOV, VirtIO, VMXNET3				
Required Host Settings		d bled sets SSE3, SSE4, and RDTSC ir ction sets AVX2 or AVX512 tings: ximum	ostructions		

Note: Performance was obtained using an Intel® Xeon® CPU E5-2683 v4 @ 2.10 GHz (AES-NI)

Public cloud

Amazon Web Services (AWS)

AWS Instance types	c5.large	c5.xlarge	c5.2xlarge	C5.4xlarge
Maximum Throughput	100 Mb/s (1300B) 50 Mb/s (IMIX)	200 Mb/s (1300B) 100 Mb/s (IMIX)	1.5 Gb/s (1300B) 450 Mb/s (IMIX)	3 Gb/s (1300B) 1 Gb/s (IMIX)
Maximum Tunnels	50	400	800	2,000
Flows per Second	1,200	2,400	4,800	9,600
Maximum Concurrent Flows	125,000	250,000	550,000	1.9 million
aximum Routes 35,000		35,000	35,000	35,000
Maximum Segments	128	128	128	128

Note: c5.2xlarge and c5.4xlarge performance and scale numbers are based on AWS Enhanced Networking (ENA SR-IOV drivers) 'enabled'



Google Cloud Platform

GCP Instance Type	n2-highcpu-4	n2-highcpu-8	N2-highcpu-16
Maximum Throughput	1.5 Gb/s (1300B) 750 Mb/s (IMIX)	4.4 Gb/s (1300B) 1.5 Gb/s (IMIX)	6.5 Gb/s (1300B) 1.9 Gb/s (IMIX)
Maximum Tunnels	50	400	800
Flows per Second	1,200	2,400	4,800
Maximum Concurrent Flows	125,000	250,000	550,000
Max Routes	35,000	35,000	35,000
Maximum Segments	128	128	128

Microsoft Azure (Without Accelerated Networking)

Azure VM Series	D2d v4	D4d v4	D8d v4	D16d v4
Maximum Throughput	100 Mb/s (1300B) 50 Mb/s (IMIX)	200 Mb/s (1300B) 100 Mb/s (IMIX)	1 Gb/s (1300B) 450 Mb/s (IMIX)	1 Gb/s (1300B) 450 Mb/s (IMIX)
Maximum Tunnels	50	400	800	2,000
Flows per Second	1,200	2,400	4,800	9,600
Maximum Concurrent Flows	125,000	250,000	550,000	550,000
Maximum Routes	35,000	35,000	35,000	35,000
Maximum Segments	128	128	128	128

Microsoft Azure (Accelerated Networking)

Azure VM Series	Ds3_v2	Ds4_v2	Ds5_v2	D4d_v5	D8d_v5	D16d_v5
Maximum Throughput	2.5 Gb/s (1300B) 1.5 Gb/s (IMIX)	5.3 Gb/s (1300B) 2.7 Gb/s (IMIX)	6.5 Gb/s (1300B) 3.1 Gb/s (IMIX)	4.5Gb/s (1300B) 1.3 Gb/s (IMIX)	6.3 Gb/s (1300B) 2.7 Gb/s (IMIX)	6.4 Gb/s (1300B) 2.9 Gb/s (IMIX)
Maximum Tunnels	400	800	2,000	400	800	2,000
Flows per Second	2,400	4,800	4,800	2,400	4,800	4,800
Maximum Concurrent Flows	250,000	550,000	550,000	250,000	550,000	550,000
Maximum Routes	35,000	35,000	35,000	35,000	35,000	35,000
Maximum Segments	128	128	128	128	128	128

- 1. Azure Accelerated Networking is supported only from release 5.4.0
- 2. Accelerated Networking is supported only on Connect-X4 and Connect-X5 NICs

Edge platform and software release matrix

Edge / Software Version	4.5.x	5.0.x	5.1.x	5.2.x	5.4.x	6.0	6.1	6.2
710-W	-	-	-	• 5.2.2+	-	•	•	•
710-5G	-	-	-	• 5.2.2+	-	•	•	•
720	-	-	-	• 5.2.2+	-	•	•	•
740	-	-	-	• 5.2.2+	-	•	•	•



Regulatory and compliance certifications

Software Licenses	Product Description
EMC	FCC (US) CE (Europe) R-Mark (Japan) SRRC (China) KCC (Korea) NCC (Taiwan) ICES-003 EN 55022 CISPR 22 AS/NZS 3548 VCCI CNS 13438 EN 300-386 EN 61000 (Immunity) EN 55024 CISPR 24 EN 50082-1 CISPR 35 (Edge 510/510-LTE/6x0/3x00 Only) EN 55035 (Edge 510/510-LTE/6x0/3x00 Only)
Safety	UL 60950-1 UL 62368-1 CAN/CSA C22.2 EN 60950-1 EN 62368-1 AS/NZS 60950-1 AS/NZS-62368-1 IEC 60950-1 IEC 62368-1 GB-4943 (CCC)
RoHS	Compiant

Warranty

The Arista VeloCloud SD-WAN 7x0 Series come with a one-year limited hardware warranty, which covers parts, repair, or replacement with a 10 business day turn-around after the unit is received.

Service and Support

Support services including next business day and 4-hour advance hardware replacement are available. For service depot locations, please see: http://www.arista.com/en/service

Head	dquarters
------	-----------

5453 Great America Parkway Santa Clara, California 95054 408-547-5500

Support

support@arista.com
408-547-5502
866-476-0000

Sales

sales@arista.com 408-547-5501 866-497-0000

Copyright 2025 Arista Networks, Inc. The information contained herein is subject to change without notice. Arista, the Arista logo and EOS are trademarks of Arista Networks. Other product or service names may be trademarks or service marks of others.

