


## Venusense ADC Appliance

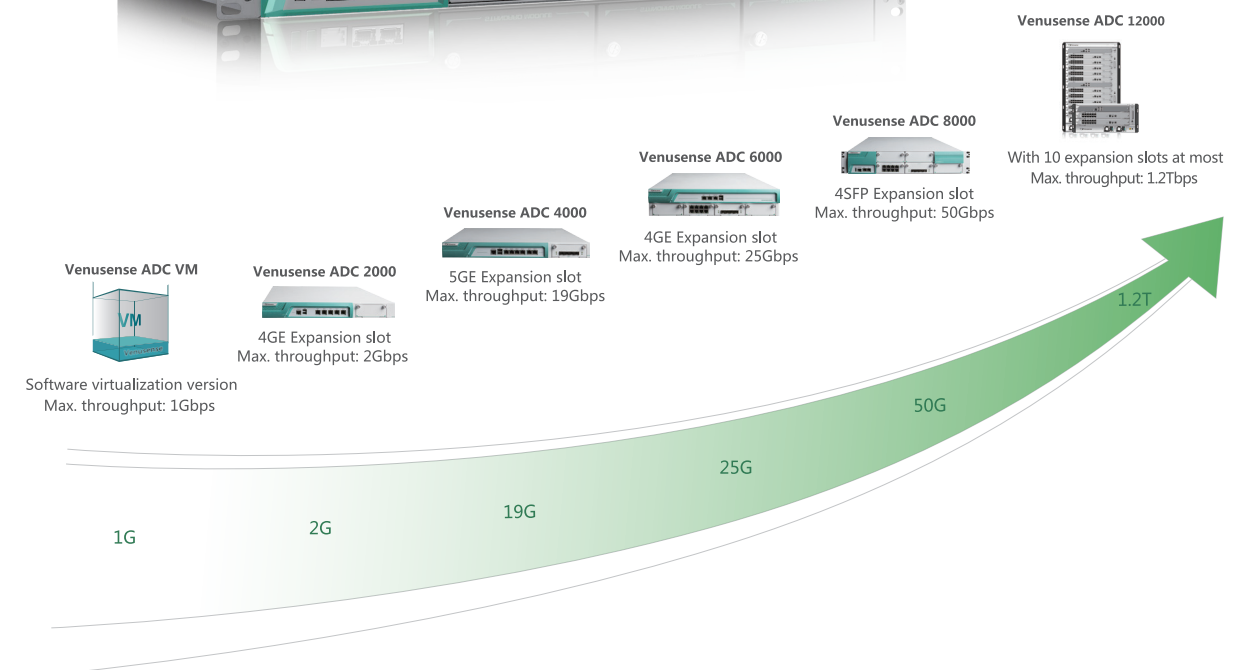
Specifications		Venusense ADC 2000	Venusense ADC 4000	Venusense ADC 6000	Venusense ADC 8000	
Performance	Throughput	2Gbps	19Gbps	25Gbps	50Gbps	
	Management Interface	1 ( RJ45 )	1 ( RJ45 )	1 ( RJ45 )	1 ( RJ45 )	
	Hardware Specification	GE Interface	4~12	5~13	4~28	4~36
		SFP Interface	0~4	0~4	4~28	4~36
		SFP+Interface	0~4	0~4	0~12	0~16
		Expansion Slot	1	1	4	5
		Internal Hard Disk	1T	1T	1T	1T
	Power Source	Single power	Standard single power, optional redundant power	Redundant power	Redundant power	
Max. Input Power	150W	250W	300W	460W		
Physical Dimensions	Unit Height	1U	1U	2U	2U	
	Length×Width×Height (mm)	426×300×44	426×449×44	432×558×88	432×558×88	
	Net Weight (kg)	6	9	15	20	
Virtualization	Max. Virtual Application Delivery Controllers	—	8	16	32	

Specifications		Venusense ADC 10000	Venusense ADC 11000	Venusense ADC 12000
Performance	Throughput	240G	600G	1200G
	SFP+ Interface	8~24	8~60	8~120
Hardware Specification	Expansion Slot	2	5	10
	Redundant Power	2	2+2	6+2
	Max. Input Power(W)	1600	3200	4200
Physical Specification	Unit Height	5U	9U	18U
	Depth×Width×Height (mm)	500×440×223	500×440×400	500×440×800
	Net Weight(Kg)	40	60	140

## Venusense ADC VM

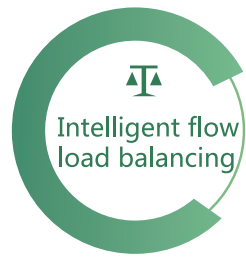
	Specification	Performance	Hardware specification			Virtualization
	Model	Throughput	CPU	RAM	Hard Disk	Support Virtualization Platform
	Venusense ADC VM	1Gbps	≥2cores	≥2G	≥2G	VMware ESXi 4.0 or above, KVM 0.14 or above, etc.

## Venusense ADC (Application Delivery Controller)



The Venusense application delivery platform of Venustech gets high performance, stability, advanced functions, flexible configuration, simple deployment and others. It covers Max throughput performance ranging from 1Gbps to 1.2Tbps which supports IPv6/IPv4 network mixing deployment. With perfect virtualized cloud computing center flow management solution, it can completely meet deployment requirements from middle and small-sized enterprise business system to operator network and new data center, realizing rapid, safe and reliable delivery of key IT business.

Besides server load balancing, Global load balancing and output multilink load balancing, Venusense products can also comprehensively guarantee the system reliability, which improves application system access speed over 3 times, saving server and bandwidth resources, perfecting user experience and effectively protecting the application system.



Intelligent flow load balancing

### Server load balancing of L4 layer

- Aim at various load sharing related on TCP, UDP and IP based applications ;
- Support load balancing of FTP, SIP and streaming media ;
- Support source address persistence and destination address persistence ;
- Support optional algorithms such as round robin, ratio, least connection, least connection with ratio, dynamic feedback, source IP Hash load.

### Server load balancing of application layer

- Based on HTTP content exchange, distribute flow according to HTTP URL requests of users, HTTP head information, and application layer information like UserAgent ;
- Get persistence based on IP, Cookie, SSL sessionID, Server-ID, customized ServerID, strategy and the like ;
- Support Cookie insertion, Cookie rewrite and X-Forward-For rewrite ;
- Get optional algorithms such as round robin, ratio, least connection, least connection with ratio, dynamic feedback, source IP Hash load ;
- Support server health check based on protocols such as ICMP, TCP, UDP, FTP, HTTP, HTTPS, LDAP, NTP, POP3, Radius, SMTP, SNMP, etc. ;
- Support health check based on business which confirms the service condition by matching the keywords of return results ;
- Support customized physical server node failure switching conditions and logics.

### Application routing

- Realize strategy routing based on source IP, destination IP, protocol and time ;
- Get identification ability based on application layer, supporting to distribute contents such as P2P, video and others via designated links ;
- Distribute the flow to designated link according to different URL addresses.

### Link load balancing

- Support inbound and outbound link loads, and improve bandwidth utilization of multi-link resources ;
- With built-in multi-operator routes, support to automatically choose the optimal link based on the access destination ;
- Support DNS agent and avoid wrong user DNS setting causing uneven link usage ;
- Realize intelligent DNS strategy and ensure to return the corresponding server address based on the operator of visiting user ;
- Dynamically choose outbound link based on the delay and packet loss ;
- Support full path health check based on protocols such as TCP, HTTP, ICMP and the like ;
- User can choose several load balancing algorithms such as round robin, ratio, least connection, least connection with ratio, static proximity, dynamic proximity, global availability, backup IP, minimum flow rate, minimum bandwidth and others.

### Global load balancing

- Support high availability and disaster tolerance of remote data center ;
- Support overall configuration and state information synchronization ;
- Choose the best station and the best node from multi data center based on principles such as region proximity, static proximity, dynamic proximity, ratio, server quantity and the like ;
- Realize greater flow between different regions based on DNS mode ;
- Support IP Anycast and HTTP protocol redirection .



Application system acceleration

### SSL server offload and TCP connection reuse

- Apply SSL agent, termination, unloading technologies, and support SSL hardware speed-up and persistence ;
- Support server-side over 10:1 TCP connection reuse, and reduce the server system pressure to maintain many connections.

### HTTP caching and content compression

- Support HTTP static and dynamic cache based on RAM, and completely compatible with HTTP1.1 protocol specifications ;
- Support compression and optimization of several file formats, greatly reduce server pressure, shorten downloading time, improve efficiency, and realize high performance data compression and processing via hardware microchips.

### TCP single-side acceleration

- Support asymmetrical deployed transport protocol optimization technologies, without any plug in or software installed on the user terminal, improving the speed of user accessing the application service.

### SPDY

- Support SPDY, support compression and optimization of various file formats by means of data stream multiplexing, requesting priority and HTTP head compression, greatly reduce server pressure, shorten resource downloading time, improve efficiency, and reduce the page loading time by 50%.

### HTTP pipelining

- HTTP pipelining technology can submit several HTTP requests at a time, which doesn't need to wait for the response of server during transmission. On the condition of high lag/latency, page loading time can be greatly reduced by the browser submitting HTTP requests in quantity.



Security protection

### Network firewall

- Detect and defend: SynFlood/Jolt2/Land-base/ping of death/Tear drop/winnuke/smurf/TCPflag/ARP attack/TCP scan/UDP scan/ping scan;
- Access control based on source IP address, destination IP address, source port, destination port, protocol type and time.

### Application firewall

- Provide SQL/XSS injection detection for HTTP protocol to protect the user website, ensuring safety and availability;
- Access control based on HTTP head, Cookie, request rate, VS address, and URI, with application-level access control function ;
- Defend CC attack based on proxy mode.



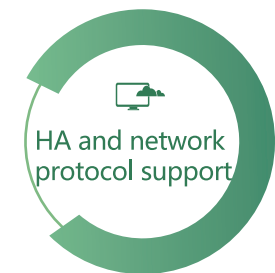
Virtualization and IPv6

### Virtualization

- Virtualization design based on Hypervisor; one Venusense equipment simulated into several ones for application; multi- virtualization systems can independently work at the same time ;
- Support deep combination with VMware vSphere server virtualization environment, and realize virtual host automatic detection, deployment and removal via interlocking with VMware.

### Transition from IPv4 to IPv6

- Comprehensively support the smooth transition from IPv4 to IPv6, with IPv6/IPv4 dual protocol stack. Support independent IPv6 and IPv4 route protocols respectively ;
- Support NAT66 and IPv6/IPv4 translation strategy technologies, including static and dynamic NAT-PT, consistent with RFC2766 ;
- Support load balancing algorithm based on IPv6 address, including round robin, ratio, priority algorithm, least connection, response time, Hash and etc.



HA and network protocol support

### HA and equipment cluster

- Support HA A-A and A-S modes, supporting session synchronization, which can rapidly switch according to conditions such as interface, VLAN, system faults, etc. ;
- Support cluster mode with up to 32 nodes, several ADCs sharing flow processing and back up for each other, and support N+1 backup mode.

### Network protocol

- Dynamic route protocol: RIP/OSPF/BGP4/VRR ;
- Network protocol: 802.1q Vlan/STP/QoS ;
- Support application protocols such as SIP, DNS, Radius, RSTP, stream media and the like.



Management and visualization

### Management

- Support multilingual version, supporting Chinese, Japanese and English switching. Provide multiple access and management modes such as encrypted SSH, HTTPS, etc. ;
- Provide XML-RPC remote management interface, and support integration with third party management software.

### Operation and maintenance information visualization

- Adopt standard SYSLOG protocol and centralized deployment ;
- Support customized reports, supporting manually or automatically report generation ;
- Realize visualization of system operation and maintenance information.