APV SERIES DATASHEET

APPLICATION DELIVERY CONTROLLERS

APV Series application delivery controllers optimize the availability, performance and security of cloud services and enterprise applications while reducing cost and complexity in the data center.

Powered by Array's 64-bit SpeedCore® architecture, APV Series application delivery controllers (ADCs) cost-effectively drive industry-leading performance across a robust set of availability, acceleration and security features to deliver unmatched overall value. Available as high-performance appliances that feature the latest in hardware acceleration and energy-efficient components or as agile virtual appliances that enable flexible pay-as-you-go business models, APV Series ADCs are engineered to boost application performance in modern data center, cloud and virtual environments and speed ROI for service provider, enterprise and public sector organizations.

Highlights & Benefits

- Dedicated appliances from 2 Gbps to 140 Gbps and virtual appliances with software upgrades from 10 Mbps to 4 Gbps to scale-up and scale-out as needed; also available on popular public cloud marketplaces such as AWS and Azure
- Integrated Layer-4 and Layer-7 server load balancing, link load balancing, global server load balancing, connection multiplexing, SSL acceleration, caching, compression, traffic shaping, DDoS protection, IPv6 and Web application security
- High-performance, kernel-level Layer-7 policy engine for enabling customizable application traffic management without impacting performance or scalability
- Industry-leading performance and $/SSL TPS for 2048-bit SSL with advanced client certificate handling for secure application support and easy application integration
- Multi-level security including a hardened OS, reverse-proxy architecture and kernel-level Web firewall for guarding applications without impacting performance
- Delivers 99.999% application availability, up to 5x application acceleration and provides a first line of defense for Web-enabled applications and cloud services
- Offloads SSL processing from Web and application servers for increased efficiency, capacity and return on investment (ROI)
- Intelligently load balances traffic across optimal WAN links to reduce costs and improve the performance of business-critical applications
- Application-specific certifications, guides and policies for rapid deployment and accelerated delivery of business-critical enterprise applications
- ePolicy™ L7 application scripting and eRoute™ L4 routing for custom control of application traffic
- IPv6 gold certified for IPv4 preservation, IPv4/6 translation and IPv6 migration
- Array eCloud™ RESTful API and XML-RPC for seamless interaction with cloud management systems and 3rd party monitoring solutions
- Integration with VMware vRealize Orchestrator and Microsoft System Center, as well as OpenStack load balancing-as-a-service (LBaaS)
- N+1 clustering for up to 32 hardware or virtual instances, single system image and stateful TCP failover for industry-leading availability and scalability
- Space-efficient, redundant-power hardware appliances that consume 10-35% less power versus alternative solutions
- Familiar CLI, intuitive cloud-friendly WebUI and centralized management for ease of use and configuration

Server Load Balancing

APV Series application delivery controllers ensure 99.999% availability for cloud services and enterprise applications. Leveraging robust distribution algorithms, health check mechanisms, clustering and failover capabilities, APV Series appliances maintain connections, ensure persistence, direct traffic away from failed servers and intelligently distribute application services across multiple servers for optimized performance and availability.

Layer-7 Policy Engine

Customized traffic management is often a trade-off between performance, control and ease-of-use. Unlike ADCs that rely on complex, compute-intensive scripting to enable custom Layer-7 policies, Array supports a vast library of policies that are hard-coded at the kernel level, are configurable with point-and-click simplicity via the WebUI or CLI, and can be combined and nested to create advanced customized application traffic management. With Array's unique approach to Layer-7 traffic management, customers get the best of all worlds: ease of use, granular control and superior performance and scalability.

2048-Bit SSL Offloading

SSL offloading reduces the number of servers required for secure applications, improves server efficiency and dramatically improves application performance.

Offloading compute-intensive key exchange and bulk encryption, and delivering industry-leading client-certificate performance, SSL acceleration is ideal for scaling secure SaaS services, e-commerce environments and business-critical applications requiring high-volume secure connectivity.

Although more secure than the old 1024-bit standard, 2048-bit keys are five times more compute intensive and can impact both performance and the cost of supporting applications. Array 2048 and 4096-bit SSL encryption offers unbeatable scalability and performance with the lowest cost per SSL TPS to offset transition costs and improve security without impacting performance.

WebWall Web Application Firewall and DDoS Protection

With WebWall®, Array's suite of Web application security capabilities, APV Series application delivery controllers can protect against distributed denial of service (DoS/DDoS) and malformed URL attacks and allow a wide range of Layer 2 through Layer 7 protective policies to be stacked atop one another for increased security.

APV appliances are security-hardened to protect applications and servers from L4 and L7 DDoS attacks and support content filtering to guard against protocol and application DDoS attacks as well as Syn-flood, tear drop, ping-of-death, Nimda, Smurf and other malicious attacks. APV appliances also feature extensive access control lists, network address translation and stateful packet flow inspection – all executed at the kernel level – to guard against attacks and unauthorized access without impacting performance or scalability.

In addition, integrated Web application firewall capabilities provide deep application data inspection – beyond IP and TCP headers – to deal with attacks such as SQL injection and cross-site scripting. Deployable in front of multiple Web or application servers, Array's Web application firewall detects and responds to signatures for known application vulnerabilities and is programmable to deal with future threats.

Link Load Balancing & GSLB

Link load balancing (LLB) and global server load balancing (GSLB) ensure 99.999% availability for wide area network (WAN) connections and geographically dispersed sites. Link load balancing

with end-to-end health monitoring and dynamic routing detects outages and monitors performance in real time to distribute traffic across multiple WAN connections for a premium, always-on end-user experience. Ideal for geographically distributed applications and multi-site architectures, global server load balancing directs traffic away from failed data centers and intelligently distributes services between sites based on proximity, language, capacity, load and response times for maximum performance and availability.

Application Acceleration

APV Series appliances leverage multiple acceleration technologies and optimizations to deliver a premium end-user experience for a wide range of applications and data services. In-memory caching increases server efficiency and improves seek and response times by over 500%, hardware or software compression can reduce bandwidth utilization and end-user response times by more than half and TCP connection multiplexing aggregates millions of short-lived client connections into persistent fast lanes that increase server efficiency by up to 70% while improving application performance.

ePolicy L7 Application Scripting

Where Array's Layer-7 policy engine cannot meet application traffic management requirements, ePolicy scripting allows transactions and content to be manipulated to achieve traffic distribution that improves data center efficiency and mitigates the effect of delivering applications over the Internet.

eRoute L4 Routing

Using eRoute, inbound and outbound WAN traffic may be load balanced across multiple ISP links based on preset and user-defined algorithms and directed across routes optimized for maximum stability and performance. Additional L4 traffic management features include VLANs, port forwarding, port and link redundancy and the ability to bundle multiple low-cost links to improve bandwidth utilization and reduce costs.

Application-Specific Certifications

In conjunction with ISVs and application developer partners, Array APV Series appliances have been certified to provide load balancing, acceleration and security for enterprise applications such as Microsoft Lync 2010 and 2013, Microsoft Exchange 2010 and 2013, SAP, Oracle, eClinicalWorks and others. Leveraging deployment guides, businesses can take the guesswork out of application delivery. Following simple step by step instructions, IT can rapidly and confidently configure APV appliances for optimized delivery of business critical applications.

Traffic Shaping & QoS

Traffic shaping optimizes application traffic on WAN links to improve bandwidth utilization and end-user response times. Supporting user-defined policies, APV Series appliances prevent bandwidth-intensive applications from over-utilizing WAN links and ensure essential applications are prioritized to meet service level agreements. Used in conjunction with link load balancing, global server load balancing and QoS features such as filters and class-based queuing, traffic shaping can dramatically improve application performance.

IPv6 Support

For organizations needing an IPv6 Web presence, server load balancing protocol translation (SLB-PT) transforms existing IPv4 Web sites into IPv6 compatible sites and greatly reduces the need for duplicate equipment, content and management. Where there is a need to make the most of depleted IPv4 resources, NAT and dual NAT (dual-stack IPv6)

allow multiple clients to utilize a single IPv4 address. In migration environments, Array IPv6 solutions support both NAT64 and DNS64 to enable IPv6 clients to connect with IPv4 servers and content. To ensure a consistent application experience across IPv4 and IPv6 clients and networks – and to enable fully-capable, next-generation solutions – IPv6 feature parity is supported for all Array APV Series application delivery controllers.

Management & Integration

APV Series application delivery controllers are simple to install and offer intuitive configuration and management via a cloud-friendly, intuitive WebUI and a familiar command line interface. Using the administration tool kit, network managers can view the status for a wide range of system parameters, enable services on the fly and automate configuration using XML-RPC or RESTful API. Leveraging extensible APIs, application and network intelligence can be integrated with third-party and cloud monitoring and management or exported for optimizing complementary data center systems. In addition, APV Series appliances support VMware vRealize Orchestrator and Microsoft System Center integration for intelligent command and control of virtualized application infrastructure.

eCloud API & OpenStack Integration

To meet the deployment and management requirements of load balancing and application delivery in the cloud, Array's eCloud API provides a script-level interface for cloud management systems to manage and monitor Array devices and assist in interactions between cloud operating systems and virtual machines running Array load balancing. For cloud providers and enterprises leveraging the OpenStack architecture for cloud management and automation, Array's integration with OpenStack load balancing-as-a-service (LBaaS) creates a standardized means to rapidly integrate with and control Array technology.

Product Editions

APV Series hardware appliances support two product editions. AppVelocity supports a rich server load balancing and application acceleration feature set optimized for local traffic management. AppVelocity-S combines SSL acceleration with server load balancing and application acceleration to create a traffic management solution ideal for SaaS, ecommerce environments and applications requiring a high degree of secure connectivity. Both AppVelocity and AppVelocity-S product editions include link load balancing and support global server load balancing as an option. vAPV virtual appliances include all features and software modules found on Array's APV Series application delivery controller dedicated appliances.

Physical & Virtual Appliances

Dedicated APV appliances leverage a multi-core architecture, SSDs, software or hardware SSL and compression, energy-efficient components and 10 GigE to create solutions purpose-built for scalable traffic management. The APV6600FIPS model offers FIPS 140-2 Level 2 compliance for organizations that require a higher level of security.

Available for common hypervisors, and available on many popular public cloud marketplaces, vAPV virtual appliances are ideal for organizations seeking to benefit from the flexibility of virtual environments, offer infrastructure services and new elastic business models or evaluate Array application delivery with minimal risk and up-front cost.

For multi-tenant environments, the AVX Series virtualized appliances support up to 32 separate vAPV, vxAG secure access gateway, or vAWF Web application firewall instances – each with its own CPU, SSL, memory and I/O resources – with mix-and-match licensing and pay-as-you-grow pricing.

Feature Specifications

Availability

Layer 2-7 Policy & Group Management	Multi-level virtual service policy routing – Static, default and backup policies and groups – Layer 2-7 application routing policies – Layer 2-7 server persistence – Application load balancing based on round robin, weighted round robin, least connections, shortest response, SNMP, QoS DNSdomain and DNS security extensions
Layer 2-3 Load Balancing	IP/MAC based load balancing for any IP protocol – Round robin, persistent IP and return to sender – Firewall, IPS/IDS, anti-spam, anti-virus and composite applications – L2 bridging support
Layer 4 Load Balancing	TCP, TCPS and UDP protocols – Round robin, weighted round robin, least connections and shortest response – Persistent IP, hash IP, consistent hash IP, persistent IP + port and port range – All single port TCP applications, RADIUS and DNS server support – Composite IP application support
Layer 7 Load Balancing	HTTP/HTTPS, FTP/FTPS, SIP, RTSP and RDP – L7 content switching (QoS network and client port - SSL and SIP session ID - HTTP URL, host name, cookie and any header - hash header, cookie and query) – URL redirect and HTTP request/response rewrite – HTTP request filter – DDoS protection
Server Persistence	Source + destination IP, Client IP, SSLID, HTTP header, URL, cookie, application – Individual session control
Content Routing & Switching	One arm, configurable reverse or transparent proxy mode per VIP – Configurable reverse or transparent proxy mode, triangle mode – Nested L7 and L4 policies – Combine L7 and L4 policies

Global Server Load Balancing	Application availability from multiple locations worldwide – DNS DoS protection – Global site/service selection – Proximity and IP persistence – Load balancing between multi-site SSL VPN deployments – SNMP pool
Link Load Balancing	Outbound: round robin, weighted round robin, shortest response time, target proximity/dynamic detection – Inbound: round robin, weighted round robin, target proximity/dynamic detection – Integrated DNS – Outbound DNS proxy
ePolicy L7 Application Scripting	Customize SLB policies and collaborate with SLB methods to realize load balancing among real services – Analyze packet contents of HTTP, simple object access protocol (SOAP), extensible markup language (XML) and diameter protocols – Receive, send, analyze, and discard generic TCP and TCPS packets – Perform pattern matching for text data – Control TCP connections – Monitor and take statistics of traffic
eRoute L4 Routing	Policy-based routing based on port, source/destination IP, UDP protocols, TCP – RIPv1, RIPv2 and OSPF support – Return to sender (RTS)/IP flow persistence – Port forwarding, link aggregation and port redundancy – Transparent to VPN remote access
Application, Server & Link Health Checks	ARP, ICMP, TCP, HTTP/HTTPS, DNS, Radius, MySQL, MsSQL, RTSP, SIP single port/protocol health checks – Multi-port health checks – Health checks by protocol and content verification – Link health checks based on physical port, ICMP and user-defined L4 – Next gateway health checks, destination path health checks – Ensure availability and performance of applications over WAN links from a single point of management – Scriptable customer-defined composite health checks
Clustering	Up to 32 nodes – Active/active, active/standby – Configuration synchronization – Application-specific VIP health checks – Stateful TCP failover – Fast failover via USB ports – Automatic ISP failover

Single System Image	Create a single VIP (single ADC instance) out of any number of dedicated, virtualized or virtual APV appliances – Enable ultimate flexibility in scaling out
IPv6	Full IPv6 support – DNS64 & NAT64 – Dual Stack Lite – IPv6 to IPv4 and IPv4 to IPv6 NAT and full IPv6 addressing – IPv6-ready gold certified
Networking	Link aggregation, VLAN/MNET, NTP – Static and port-based NAT, advanced NAT for transparent use of multiple WAN links

Acceleration

Application Performance	Dynamic detect – Client connection persistence – Connection multiplexing – TCP buffering – IEEE 802.3ad link aggregation
SSL Acceleration (2048 & 4096-bit)	Hardware SSL processing – SSLv3 and TLSv1 – 4096-bit maximum cipher key size (RSA or ECC) – End-to-end security (Server-side SSL communication) – SSL session reuse and timeout control – Cipher strength reduction – Customizable cipher suite order – Customizable SSL error pages – Sharable to multiple SLB services – SSL selfcheck – Server name indication (SNI)
Compression	Hardware or software accelerated – Virtualized compression – Inline HTTP processing – Compresses HTML, XML, Java scripts and CSS – Compresses Microsoft file formats (DOC, XLS, PPT) and PDF
Caching	Virtualized, memory-based cache – HTTP 1.1 compliant, policy-based cache
Traffic Shaping	Guarantees application performance – Rate shaping for setting user-defined rate limits on critical applications – QoS for traffic prioritization – Supports CBQs and borrow and unborrow bandwidth from queues – Advanced ACL (SLB QoS) – Supports QoS filters based on ports and protocols including TCP, UDP and ICMP

Security

WebWall Web Application Security	Hardened OS – Secure access only, access control based on client certificate information and access method – Customer configurable SSL/TLS version, cipher suite and minimum cipher strength – Tamper-proof key and certificate protection – WebWall stateful packet-inspection firewall – Over 1000 ACL rules without performance degradation – Proxy-based firewall – TCP syn-flood protection – Flash and surge event protection – DoS protection – HTTP access method control – URL filtering – HTTP/DNS cache for mitigating DDoS – Web Application Firewall – Deep application data inspection for dealing with attacks such as SQL injection and cross-site scripting – Detects and responds to known application vulnerabilities – Programmable to deal with future threats
DDoS Protection (SLB)	Protocol Attacks: SSL invalid packet, SSL handshake attack, HTTP invalid packet attack – Application Attacks: HTTP slow attack, HTTP flood attack, bandwidth consumption attack – DDoS attack logging
Client-Server Certificate Management	CSR and private key generation – Self-signed certificate support – Import certificate and private key – Import certificate format – Extensive certificate support – Certificate backup and restore – Wildcard certificate support – Server Name Indication (SNI)
Client Certificate Authentication & Authorization	Turbo client certificate verification – Root and intermediate CA import – Basic client certificate verification – Certificate chain support – Certificate revocation list (HTTP, FTP, LDAP) – Online certificate status protocol (OCSP, HTTP/HTTPS) – Certificate-based access control – Inside SSL server, two-way certificates
Client Certificate Application Integration	Parse client certificate field information with different language/encoding – Pass individual field/group and field/customer format to back-end applications – HTTP header, URL and cookie – Integrated with proxy rewrite – Detailed SSL statistics

Management

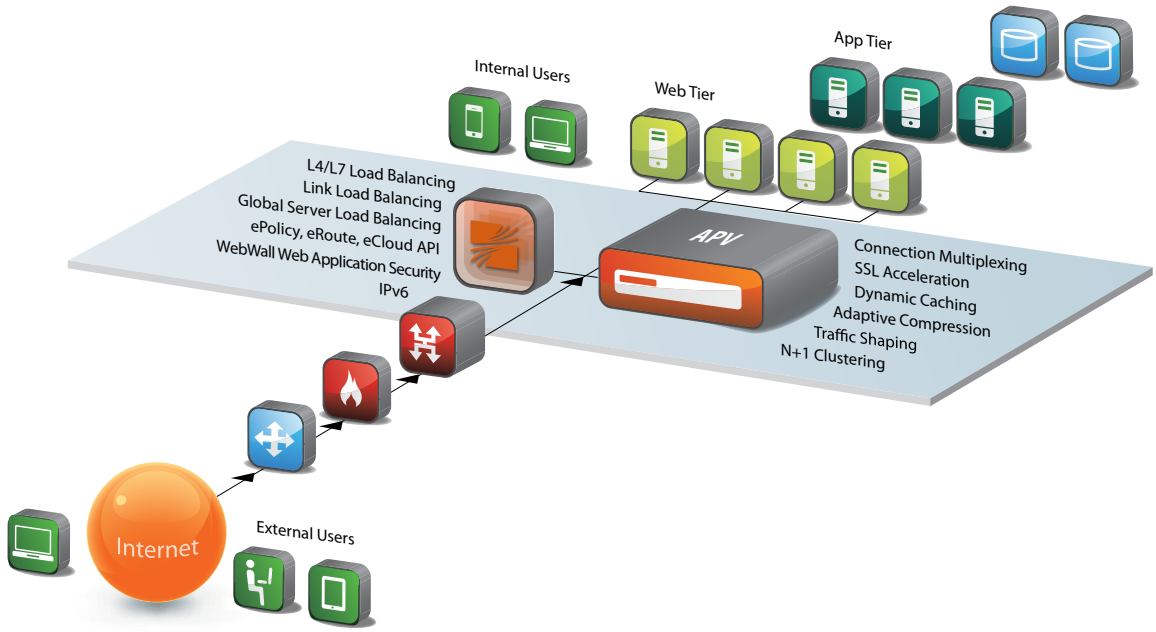
System

Centralized cluster management – Secure CLI, WebUI and SSH remote management – XML-RPC for integration with 3rd party management and monitoring – SNMP V2/V3 and private MIBs – Syslog (UDP or TCP) – Administrator and operator account management – E-mail, paging and alerting capability – Multiple configuration files and unit configuration synchronization – Online troubleshooting – Real-time monitoring – Role-based administration control – HTTP/2 support

eCloud API

Interface for cloud management systems to control and monitor hardware and virtual APV appliances – Assists interaction between components such as virtual machines in CloudOS environments – Remote management of APV appliances – Notification of events on APV appliances – eCloud demo integrated on APV appliance – Supports integration with OpenStack Load Balancing-as-a-Service(LBaaS), VMware Cloud Orchestrator (vCO) and Microsoft System Center standards

Array Application Delivery Architecture



Product Specifications

● = STANDARD O = OPTIONAL

	AppVelocity		AppVelocity-S	
	APV 1600/1600T/ 2600	APV 3600/3650/ 5600/6600/ 7600/10650/11600	APV 1600/1600T/ 2600	APV 3600/3650/ 5600/6600/ 7600/10650/11600
L2, L4 & L7 SLB	●	●	●	●
LLB	●	●	●	●
GSLB	O	O	O	O
L7 Policy Engine	●	●	●	●
ePolicy Scripting	●	●	●	●
eRoute Routing	●	●	●	●
Transparent Proxy	●	●	●	●
SSL (SW)	●	●		
SSL (HW)			●	●
Compression (SW)	●	●	●	●
Compression (HW)				●
RAM Caching	●	●	●	●
Traffic Shaping	●	●	●	●
Web Application Security (Including WAF)	●	●	●	●
IPv6 Support	●	●	●	●
Multi-language WebUI	●	●	●	●
Single System Image	●	●	●	●
Fast Failover	●	●	●	●
Clustering	●	●	●	●
eCloud API & LBaaS Integration	●	●	●	●

	APV1600/ 1600T	APV2600	APV3600/ 3650	APV5600	APV6600	APV6600 FIPS	APV7600	APV10650	APV11600
Max. L4 Throughput	2 Gbps/ 2.5 Gbps	10 Gbps	20 Gbps/ 30 Gbps	15 Gbps	35 Gbps	35 Gbps	80 Gbps	120 Gbps	140 Gbps
Max. SSL TPS (2048)	2K/2K	5K	25K/25K	25K	25K	9K	70K	70K	70K
Max. SSL Throughput	700 Mbps/ 1 Gbps	3 Gbps	15 Gbps/ 15 Gbps	10 Gbps	20 Gbps	2 Gbps	45 Gbps	40 Gbps	50 Gbps
1 GbE Copper	●	●	●	●	●	●	o		
1 GbE Fiber		o	●	o	o	o			
10 GbE Fiber		o	●	●	●	●	●	●	●
Power Supply	APV1600, 1600T, 2600	Single Power: 100-240VAC, 8-4A, 50-60Hz							
	APV2600	Dual Power: 100-240VAC, 8-4A, 50-60Hz							
	APV3600, 3650	Dual Power: 100-240VAC, 5-3A, 50-60Hz							
	APV5600, 6600, 6600FIPS, 7600, 10650, 11600	Dual Power: 100-240VAC, 10-5A, 50-60Hz							
Dimensions	APV1600, 1600T, 2600	Single Power: 1U – 17” W x 15” D x 1.75” H							
	APV2600, 3600, 3650	Dual Power: 1U – 17” W x 19.875” D x 1.75” H							
	APV5600, 6600, 6600FIPS, 7600, 10650, 11600	Dual Power: 2U – 17” W x 22.5” D x 3.5” H							
Weight	APV1600, 1600T, 2600	Single Power: 13.6 lbs.							
	APV2600	Dual Power: 17.2 lbs.							
	APV3600, 3650	Dual Power: 19.8 lbs.							
	APV5600, 6600, 6600FIPS, 7600, 10650, 11600	Dual Power: 28 lbs.							
Environmental	Operating Temperature: 0° to 45°C, Humidity: 0% to 90%, Non condensing								
Regulatory Compliance	ICES-003, EN 55024, CISPR 22, AS/NZS 3548, FCC, 47FR part 15 Class A, VCCI-A. APV6600FIPS only: FIPS140-2 Level 2								
Safety	CSA, C/US, CE, IEC 60950-1, CSA 60950-1, EN 60950-1								
Support	Gold, Silver and Bronze Level Support Plans								
Warranty	1 Year Hardware, 90 Days Software								

	Supported Hypervisors (64-bit only)	Virtual Machine Requirements
vAPV *With the exception of hardware SSL acceleration, vAPV virtual application delivery controllers support all APV features.*	VMware ESXi 4.1 or Later XenServer 5.6 or Later OpenXen 4.0 or Later KVM 1.1.1-1.8.1 or later Hyper-V (Windows Server 2012)	2 Virtual CPUs 4 Virtual Network Adapters 2GB RAM 40GB Disk

Ordering Information

Ordering No.	Description
APV1600	
AW977200	APV1600 AppVelocity ADC (SLB, LLB, 4x1GbE copper ports, 1U)
AW977201	APV1600 AppVelocity-S ADC (SLB, LLB, 4x1GbE copper ports, , 10,000 SSL TPS 1K Keys or 2000 SSL TPS 2K Keys, 1U)
AW977205	APV1600T AppVelocity ADC (SLB, LLB, 4x1GbE copper ports, 1U)
AW977206	APV1600T AppVelocity-S (4GB, 4x1GbE copper ports, 10,000 SSL TPS 1K Keys or 2,000 SSL TPS 2K Keys, 1U)
AW920540	Upgrade from APV1600 AppVelocity to APV1600 Turbo AppVelocity - Field upgradeable
AW920541	Upgrade from APV1600 AppVelocity-S to APV1600 Turbo AppVelocity-S - Field upgradeable
APV2600	
AW960001	APV2600 AppVelocity ADC (SLB, LLB, 4x1GbE copper ports, 1U)
AW960002	APV2600-S1 AppVelocity-S ADC (SLB, LLB, 4x1GbE copper ports, 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960003	APV2600 AppVelocity ADC (SLB, LLB, 8x1GbE copper ports, 1U)
AW960004	APV2600-S1 AppVelocity-S ADC (SLB, LLB, 8x1GbE copper ports, 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960005	APV2600-S2 AppVelocity-S TPS Boost ADC (SLB, LLB, 8x1GbE copper ports, 25,000 SSL TPS 1K Keys or 5,000 SSL TPS 2K Keys, 1U)
AW960006	APV2600 AppVelocity ADC (SLB, LLB, 8x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 1U)
AW960007	APV2600-S1 AppVelocity-S TPS ADC (SLB, LLB, 8x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960008	APV2600-S2 AppVelocity-S TPS Boost ADC (SLB, LLB, 8x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 25,000 SSL TPS 1K Keys or 5,000 SSL TPS 2K Keys, 1U)
AW960009	APV2600T AppVelocity ADC (SLB, LLB, 4x1GbE copper ports, 2x10GbE SFP+ ports, 1U)
AW960010	APV2600T-S1 AppVelocity-S TPS ADC (SLB, LLB, 4x1GbE copper ports, 2x10GbE SFP+ ports, 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960011	APV2600T-S2 AppVelocity-S TPS Boost ADC (SLB, LLB,4x1GbE copper ports, 2x10GbE SFP+ ports, 25,000 SSL TPS 1K Keys or 5,000 SSL TPS 2K Keys, 1U)
AW960012	APV2600T AppVelocity ADC (SLB, LLB, 4x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 1U)
AW960013	APV2600T-S1 AppVelocity-S TPS ADC (SLB, LLB, 4x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960014	APV2600T-S2 AppVelocity-S TPS Boost ADC (SLB, LLB, 4x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 25,000 SSL TPS 1K Keys or 5,000 SSL TPS 2K Keys, 1U)
APV2600 - Dual Power Supplies	
AW960015	APV2600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 4x1GbE copper ports, 1U)
AW960016	APV2600-S1 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 4x1GbE copper ports, 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960017	APV2600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 1U)
AW960018	APV2600-S1 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960019	APV2600-S2 AppVelocity-S TPS Boost Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 1U, 25,000 SSL TPS 1K Keys or 5,000 SSL TPS 2K Keys)
AW960020	APV2600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 1U)
AW960021	APV2600-S1 AppVelocity-S TPS Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960022	APV2600-S2 AppVelocity-S TPS Boost Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 25,000 SSL TPS 1K Keys or 5,000 SSL TPS 2K Keys, 1U)
AW960023	APV2600T AppVelocity Dual Power Supplies ADC (SLB, LLB, 4x1GbE copper ports, 2x10GbE SFP+ ports, 1U)
AW960024	APV2600T-S1 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 4x1GbE copper ports, 2x10GbE SFP+ ports, 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)
AW960025	APV2600T-S2 AppVelocity-S TPS Boost Dual Power Supplies ADC (SLB, LLB, 4x1GbE copper ports, 2x10GbE SFP+ ports, 25,000 SSL TPS 1K Keys or 5,000 SSL TPS 2K Keys, 1U)
AW960026	APV2600T AppVelocity Dual Power Supplies ADC (SLB, LLB, 4x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 1U)
AW960027	APV2600T-S1 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 4x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 14,000 SSL TPS 1K Keys or 2,800 SSL TPS 2K Keys, 1U)

Ordering No.	Description
AW960028	APV2600T-S2 AppVelocity-S TPS Boost Dual Power Supplies ADC (SLB, LLB, 4x1GbE copper ports, 2x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 25,000 SSL TPS 1K Keys or 5,000 SSL TPS 2K Keys, 1U)
APV3600/3650 - Dual Power Supplies	
AW977880	APV3600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 1U)
AW977881	APV3600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 25,000 TPS 2K Keys, 1U)
AW977882	APV3650 AppVelocity Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 1U)
AW977883	APV3650 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 25,000 SSL TPS 2K Keys, 1U)
APV 1U Appliances: Feature Options	
AW920610	APV1600T/TM8.x Feature Option: Global Server Load Balancing License
AW920620	APV2600/3600/3650 Feature Option: Global Server Load Balancing License
APV5600	
AW960030	APV5600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 2x10GbE SFP+ ports, 2U)
AW960031	APV5600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 2x10GbE SFP+ ports, 80,000 SSL TPS 1K Keys or 25,000 SSL TPS 2K Keys, 2U)
AW960032	APV5600 AppVelocity Dual Power Supplies ADC ((SLB, LLB, 8x1GbE copper ports, 4x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 2U)
AW960033	APV5600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 80,000 SSL TPS 1K Keys or 25,000 SSL TPS 2K Keys, 2U)
APV6600	
AW960040	APV6600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 16x1GbE copper ports, 2x10GbE SFP+ ports, 2U)
AW960041	APV6600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 16x1GbE copper ports, 2x10GbE SFP+ ports, 80,000 SSL TPS 1K Keys or 25,000 SSL TPS 2K Keys, 2U)
AW960042	APV6600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 16x1GbE copper ports, 4x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 2U)
AW960043	APV6600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB,, 16x1GbE copper ports, 4x1GbE SFP ports (SX Fiber incl.), 2x10GbE SFP+ ports, 80,000 SSL TPS 1K Keys or 25,000 SSL TPS 2K Keys, 2U)
AW960044	APV6600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 16x1GbE copper ports, 4x10GbE SFP+ ports, 2U)

Ordering No.	Description
AW960045	APV6600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 16x1GbE copper ports, 4x10GbE SFP+ ports, 80,000 SSL TPS 1K Keys or 25,000 SSL TPS 2K Keys, 2U)
AW960046	APV6600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x10GbE SFP+ ports, 25,000 SSL TPS 2K Keys, 2U)
APV6600 FIPS	
AW960049	APV6600 AppVelocity-FIPS Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 2x10GbE SFP+ ports, 9,000 SSL TPS 2K Keys, 2U)
AW960048	APV6600 AppVelocity-FIPS Dual Power Supplies ADC (SLB, LLB,, 8x1GbE copper ports, 4x10GbE SFP+ ports, 9,000 SSL TPS 2K Keys, 2U)
APV7600	
AW977980	APV7600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 8x10GbE SFP+ ports, 2U)
AW977981	APV7600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x10GbE SFP+ ports, 35,000 SSL TPS 2K Keys, 2U)
AW977982	APV7600 AppVelocity-S Turbo Dual Power Supplies ADC (SLB, LLB, 8x10GbE SFP+ ports, 70,000 SSL TPS 2K Keys, 2U)
AW977983	APV7600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 16x10GbE SFP+ ports, 2U)
AW977984	APV7600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 16x10GbE SFP+ ports, 35,000 SSL TPS 2K Keys, 2U)
AW977985	APV7600 AppVelocity-S Turbo Dual Power Supplies ADC (SLB, LLB, 16x10GbE SFP+ ports, 70,000 SSL TPS 2K Keys, 2U)
AW977986	APV7600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x10GbE SFP+ ports, 35,000 SSL TPS 2K Keys, 2U)
AW977987	APV7600 AppVelocity-S Turbo Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x10GbE SFP+ ports, 70,000 SSL TPS 2K Keys, 2U)
APV10650	
AW960060	APV10650 AppVelocity Dual Power Supplies ADC (SLB, LLB, 8x10GbE SFP+ ports, 2U)
AW960061	APV10650 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x10GbE SFP+ ports, 70,000 SSL TPS 2K Keys, 2U)
AW979007	APV10650 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x1GbE copper ports, 4x10GbE SFP+ ports, 70,000 SSL TPS 2K Keys, 2U)
AW960062	APV10650 AppVelocity Dual Power Supplies (SLB, LLB, 16x10GbE SFP+ ports, 2U)
AW960063	APV10650 AppVelocity-S Dual Power Supplies (SLB, LLB, 16x10GbE SFP+ ports, 70,000 SSL TPS 2K Keys, 2U)

Ordering No.	Description
APV11600	
AW977990	APV11600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 8x10GbE SFP+ ports, 2U)
AW977991	APV11600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 8x10GbE SFP+ ports, 70,000 SSL TPS 2K Keys, 2U)
AW977992	APV11600 AppVelocity Dual Power Supplies ADC (SLB, LLB, 16x10GbE SFP+ ports, 2U)
AW977993	APV11600 AppVelocity-S Dual Power Supplies ADC (SLB, LLB, 16x10GbE SFP+ ports, 70,000 SSL TPS 2K Keys, 2U)
APV 2U Appliances: Feature Options	
AW920560	APV5600/6600/7600/10650/11600 TM8.x Feature Option: Global Server Load Balancing License
AU920641	Hardware Compression license ption for AppVelocity-S models APV5600/6600/7600/10650/11600
Factory Options	
AW910277	Factory Only: SSD option for APV x600 Series.
Other Hardware Options	
AW300052	USB Fast Failover Cable for APV1600/2600/5600/6600/7600/10650/11600
AR400023	Power Supply Module: 450W, 1U (100-240V, 8-4A, 63-47Hz)
AR400024	Power Supply Module: 800W, 2U (100-240V, 10-5, 50-60Hz)
AR400019	Power Supply Module: 275W, 1U (100-240V, 4-2A, 63-47Hz)
AR400018	Power Supply Module: 620W, 2U (100-240V, 10, 63-47Hz)
AW969001	C14 to C13 200V System Power Cord (Japan only)
SFP Optical Transceivers	
AW220230	APV Field Upgrade: SX SFP Fiber Optical Transceiver (1G-Multi Mode 550M / LC / 850nm)
AW220231	APV Field Upgrade: LX SFP Fiber Optical Transceiver (1G-Multi Mode 2KM / LC / 1310nm)

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VERSION: FEB-2016-REV-A