

# AX Series

**Application Networking Platform**  
Advanced Server Load Balancing



## Flexibility to Solve Critical Business Challenges



### Any App

#### Web Scalability and Availability

Today's web servers are conduits for complex applications that require intelligence at every layer. If an application is slow or unavailable, or an Internet connection or server goes down, business productivity and profits are lost. A10's flexible Application Networking Platforms give customers full control of their web, and any application environment, enabling scalability and availability for all mission-critical applications.

#### IPv4 Exhaustion and IPv6 Migration

A10 delivers powerful, enterprise and carrier class IPv4/IPv6 solutions at attractive price points that will enable organizations to extend and preserve existing IPv4 investments and provide a clear path to IPv6. As a market leader, A10 enables communication and connectivity between the two protocols, with many large, live deployments worldwide.



### Any Cloud

#### Enterprises, Web Giants, Service Providers

With over 2,000 customers across all verticals, including brand names such as GE Healthcare, LinkedIn and Microsoft, A10 has focused expertise to service constantly evolving network requirements with a rapid return on investment (ROI). Customer benefits include the ability to deploy differentiated customer services, reduce costs through data center consolidation, increase efficiency with large traffic volumes, accelerate web speed to drive customer satisfaction and many more.

#### Multi-tenancy and Virtual Clustering

Any Hosting or Service Provider or organization with multiple business units sharing the same infrastructure can greatly reduce Total Cost of Ownership (TCO) for Application Networking services with A10's platform virtualization. Unique clustering technology extends unmatched scaling from millions to billions of connections as required.



### Any Size

#### On-demand Virtual Appliances

A10 offers virtual appliances via hypervisor solutions in addition to its hardware platforms. With scale-as-you-grow options in numerous different sizes, A10's virtual machines can be rapidly deployed on commodity hardware, scaling up and down on-demand for changing traffic volumes and use cases.

#### Scalable and Faster Appliances

At A10, performance is a path to data center efficiency, and not the end itself. With the industry's fastest Application Networking platforms in the most compact form factors, A10's performance delivers overall optimization, ensuring non-stop commerce and applications with lower operational costs. All features are included without licenses so that additional budget is not needed for new features, allowing for rapid deployments without any license complexity, streamlining internal operations.

**ACOS**  
Powered Systems

Advanced Core  
Operating System

Unique 64-bit shared  
memory architecture  
for unparalleled performance and efficiency



The AX Series delivers the industry's most flexible platform with virtually no architectural limitations, allowing customers to solve any application challenge.



AX 1030



AX 2500



AX 3030



AX 3000-11



AX 3530

### Any App

- Rich load balancing for L4/7 applications such as HTTP, HTTPS, DNS, SIP, FIX, RADIUS, FTP, SMTP and many more
- Application certifications, templates and deployment guides include Microsoft Exchange 2010, Lync 2010 and OCS; Oracle and VMware certification for AX-V and VMready certification for SoftAX, etc.
- Built-in aFlex TCL scripting and aXAPI Restful API for advanced customization
- Full support of IPv6 and

advanced High Availability and Security features

- SSL Offload for 1024, 2048 and 4096-bit keys

### Any Cloud

- Physical appliances (for raw performance)
- Multi-tenant physical appliances (Application Delivery Partitions for maximum ADC density)
- Virtual Appliance (SoftAX for flexibility)
- Virtual Appliances running on AX hardware (AX-V multi-tenancy)

for strong isolation and guaranteed performance)

- Virtual Chassis (aVCS for scalability and performance)

- aCloud (for IaaS)

### Any Size

- Megabits to Terabits (SoftAX to aVCS)
- Highest connection per second scalability for L4, L7, SSL, DDoS protection and more
- All features are included without any additional licenses at an affordable price

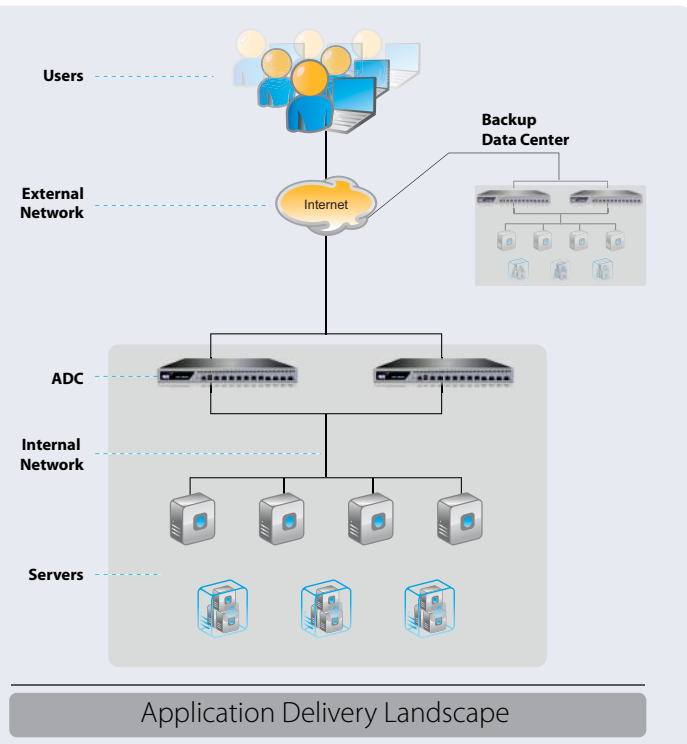
## Appliance Summary

	AX 1030	AX 2500	AX 3030	AX 3000-11-GCF	AX 3530
<b>Layer 4 Throughput</b>	7.5 Gbps	11 Gbps	27 Gbps	30 Gbps	115 Gbps
<b>Layer 4 CPS</b>	430k	300K	580k	1 million	1.3 million
<b>SSL CPS (1024/2048)</b>	5.5k <sup>†</sup> /1.2k <sup>†</sup>	30k <sup>††</sup> /5k <sup>††</sup>	12k <sup>†</sup> /2.7k <sup>†</sup>	51k <sup>††</sup> /24k <sup>††</sup>	120k <sup>††</sup> /98k <sup>††</sup>
<b>Ethernet Interface</b>					
1 Gb Copper	6	8	6	8	4
1 Gb Fiber (SFP)	2	4	2	8	2
10 Gb Fiber (SFP+)	0	0	2	4	12
40 Gb Fiber (QSFP+)	0	0	0	0	0
<b>Application Delivery Partitions (ADP) RBA/L3V</b>	128/32	128/32	128/64	128/64	128/64
<b>Maximum Power Consumption</b>	155 W	250 W	188 W	315 W	467 W
<b>Performance Per Watt (PPW)**</b>	2774	1200	3085	3175	2731
<b>Power Supply</b>	1 x 400 W*	Dual 400 W RPS	Dual 400 W RPS	Dual 400 W RPS	Dual 750 W RPS
<b>Hardware Acceleration</b>					
Linear Decoupled Architecture	Yes	Yes	Yes	Yes	Yes
Flexible Traffic ASIC	No	No	No	No	No
Switching/Routing ASIC	No	No	No	No	No
SSL Acceleration ASIC	Yes	Yes	Yes	Yes	Option
SSL Card Option	No	1	No	1	1 x 2 cards
Compression ASIC Card Option	No	1	No	1	No
Total Optional Cards Per Unit	0	1	0	1	2
<b>Dimensions</b>	1.7 in (H), 17.2 in (W), 16.6 in (D)	1.75 in (H), 17 in (W), 21.8 in (D)	1.7 in (H), 17.2 in (W), 16.6 in (D)	1.75 in (H), 17 in (W), 21.8 in (D)	1.75 in (H), 17.25 in (W), 22.8 in (D)
<b>Rack Units (Mountable)</b>	1 U	1 U	1 U	1 U	1 U
<b>Unit Weight</b>	17.5 lbs	25 lbs	19.5 lbs	25 lbs	29.6 lbs
<b>Operating Ranges</b>	Temperature and Humidity 0° - 40° C 5% - 95%				
<b>Regulatory Certification</b>	FCC Class A, UL, CE, TUV, CB, VCCI, NEBS***, FIPS 140-2^				
<b>Standard Features</b>	Solid-state Drive (SSD), Management Interface, Console Port, Hot Swap Smart Fans, Standard Warranty, 90-day Hardware & Software				

† Standard SSL performance | †† With maximum SSL cards | ^ AX 2500, AX 2600-GCF, AX 3000-GCF and AX 3000-11-GCF (FIPS model must be purchased)

\* Optional RPS available | \*\* Layer 4 CPS per watt | \*\*\* NEBS Level 3 (AX 2500, AX 3000-GCF and AX 5200)

100 to 240 VAC, Frequency 50 – 60 Hz (applies to all appliances)



**SoftAX**

Virtual appliance for  
VMware, KVM and Xen

**AX-V**

Turnkey VMware-based  
appliances delivering  
SoftAX on trusted AX  
Series hardware

**aGalaxy**

Centralized management  
and control for all AX  
Series appliances



AX 3200-12



AX 3400



AX 5200-11



AX 5630

## Flexible Traffic ASIC (FTA) Models

	AX 3200-12	AX 3400	AX 5200-11	AX 5630
<b>Layer 4 Throughput</b>	19.5 Gbps	38 Gbps	40 Gbps	77 Gbps
<b>Layer 4 CPS</b>	1.1 million	2.5 million	4.8 million	6 million
<b>SSL CPS (1024/2048)</b>	44k <sup>††</sup> /24k <sup>††</sup>	84k <sup>††</sup> /24k <sup>††</sup>	155k <sup>††</sup> /130k <sup>††</sup>	180k <sup>††</sup> /174k <sup>††</sup>
<b>Ethernet Interface</b>				
1 Gb Copper	20	20	0	0
1 Gb Fiber (SFP)	4	4	4	4
10 Gb Fiber (SFP+)	4	4	16*	24
40 Gb Fiber (QSFP+)	0	0	0	4
<b>Application Delivery Partitions (ADP) RBA/L3V</b>	128/64	128/64	128/128	128/128
<b>Maximum Power Consumption</b>	313 W	338 W	660 W	890 W
<b>Performance Per Watt (PPW)**</b>	3674	7396	7273	6742
<b>Power Supply</b>	Dual 400 W RPS	Dual 400 W RPS	Dual 1200 W RPS	2+1 1200 W RPS
<b>Hardware Acceleration</b>				
Linear Decoupled Architecture	Yes	Yes	Yes	Yes
Flexible Traffic ASIC	1 x FTA-2	2 x FTA-2	2 x FTA-2	4 x FTA-2
Switching/Routing ASIC	Yes	Yes	Yes	Yes
SSL Acceleration ASIC	Yes	Yes	Option	Option
SSL Card Option	1	1	1-4	1 x 2 cards or 2 x 2 cards
Compression ASIC Card Option	1	1	1-2	No
Total Optional Cards Per Unit	1	1	4	4
<b>Dimensions</b>	1.7 in (H), 17 in (W), 24.6 in (D)		3.5 in (H), 17 in (W), 29 in (D)	5.3 in (H), 16.9 in (W), 28 in (D)
<b>Rack Units (Mountable)</b>	1 U	1 U	2 U	3 U
<b>Unit Weight</b>	26 lbs	26.5 lbs	62 lbs	67 lbs
<b>Operating Ranges</b>	Temperature and Humidity 0° - 40° C 5% - 95%			
<b>Regulatory Certification</b>	FCC Class A, UL, CE, TUV, CB, VCCI, NEBS***, FIPS 140-2^			
<b>Standard Features</b>	Solid-state Drive (SSD), Management Interface, Console Port, Hot Swap Smart Fans, Standard Warranty, 90-day Hardware & Software			

† Standard SSL performance | †† With maximum SSL cards | ^ AX 5100, AX 5200 and AX 5200-11 (FIPS model must be purchased)

\* XFP | \*\* Layer 4 CPS per watt | \*\*\* NEBS Level 3 (AX 2500, AX 3000-GCF and AX 5200)

100 to 240 VAC, Frequency 50 - 60 Hz (applies to all appliances)

# Features\*

## Application Delivery Features

- Comprehensive IPv4/IPv6 Support
- Advanced Layer 4/Layer 7 Server Load Balancing
  - ♦ Fast HTTP, Full HTTP Proxy
  - ♦ High-performance, template-based Layer 7 switching with header/URL/domain manipulation
  - ♦ Comprehensive Layer 7 application persistence support
- Comprehensive load balancing methods
  - ♦ Round Robin, Least Connections, Weighted RR, Weighted LC, Fastest Response, & more
- aFleX – deep packet inspection and transformation for customizable, application-aware switching
- Advanced Health Monitoring
  - ♦ Comprehensive Protocol Support – ICMP, TCP, UDP, HTTP, HTTPS, FTP, RTSP, SMTP, POP3, SNMP, DNS, RADIUS, LDAP, & more
  - ♦ TCL Scriptable Health Check Support
  - ♦ High Availability – Active-Active, Active-Standby configurations with sub-second failover
  - ♦ SIP Load Balancing for VoIP and other rich-media applications
  - ♦ STARTTLS support for Secure Email (POPS, SMTPS, IMAPS) & LDAPS
- Spam Filter Support – high-speed application of very large black/white lists
- Firewall Load Balancing (FWLB)
- Global Server Load Balancing (GSLB)
- Transparent Cache Switching (TCS)
- Link Load Balancing (LLB)
- Diameter AAA Load Balancing

## Acceleration & Security Features

- HTTP Acceleration & Optimization
  - ♦ HTTP Connection Multiplexing

- ♦ HTTP Caching
- ♦ HTTP Compression
- SSL Acceleration
  - ♦ Hardware-based SSL Offload
  - ♦ Support for all TCP Protocols – SSL Termination, SSL Bridging (SSL Initiation)
  - ♦ TLS 1.2 and 4096-bit SSL key support
- SSL Session ID Reuse
- Hardware-based SYN Cookies, IP Anomaly Detection
- Connection Rate Limiting/Connection Limiting
- DNS Application Firewall
- SSL Intercept

## High Performance, Scalable Platform

- ACOS Operating System
  - ♦ Multi-core, Multi-CPU support
  - ♦ Linear Application Scaling
  - ♦ Linux on Control Plane
- ACOS on Data Plane

## Networking

- Integrated Layer 2/Layer 3
- Transparent Mode/Gateway Mode
- Routing – Static Routes, IS-IS (v4/v6), RIPv2/ng, OSPF v2/v3, BGP4+
- VLAN (802.1Q)
- Trunking (802.1AX), LACP
- Access Control Lists (ACLs)
- Traditional IPv4->IPv4 NAT/NAPT
- IPv6->IPv6 NAPT
- Jumbo Frame support

## IPv6 Migration/IPv4 preservation

- Full native IPv6 management and feature support
- SLB-PT (Protocol Translation), SLB-64 (IPv4->IPv6, IPv6->IPv4)
- Application Level Gateways (ALGs) for FTP, TFTP, RTSP, PPTP, SIP, ICMP, DNS, ESP

- Carrier Grade NAT (CGN), Large Scale NAT (LSN), NAT444, NAT44, NAT46
- NAT64/DNS64, DS-Lite, 6rd

## Management

- Dedicated Management Interface (Console, SSH, Telnet, HTTPS)
- Web-based Graphical User Interface (GUI) with Language Localization
- Industry-standard Command Line Interface
- SNMP, Syslog, Email Alerts
- Port Mirroring
- REST-style XML API (aXAPI)
- LDAP, TACACS+, RADIUS Support

## Virtualization

- aVCS (AX Virtual Chassis System)
- SoftAX Virtual Appliance for VMware vSphere, Citrix Xen and KVM
- Multi-tenancy with Application Delivery Partitions (ADPs)
  - ♦ Role-based Administration (RBA)
  - ♦ Partition-based Management
  - ♦ L2/L3 Virtualization
- Hypervisor acceleration and management integration

## Carrier-grade Hardware

- Advanced hardware architecture
- Redundant Power Supplies
- AC or DC Power Supplies
- Smart Fans (hot swap)
- Solid-state drive (SSD) and Compact Flash
- High Port Density
- 40 Gb, 10 Gb, 1 Gb Ports
- Tamper Detection
- Lights Out Management (LOM/IPMI)

\*Features may vary by appliance.

## Customer Driven Innovation

To learn more about the AX Series Application Networking Platform and how it can enhance your business, contact A10 Networks at: [www.a10networks.com/contact](http://www.a10networks.com/contact) or call to talk to an A10 sales representative.

## About A10 Networks

A10 Networks was founded in 2004 with a mission to provide innovative networking and security solutions. A10 Networks makes high-performance products that help organizations accelerate, optimize and secure their applications. A10 Networks is headquartered in Silicon Valley with offices in the United States and centers of excellence around the globe. For more information, visit [www.a10networks.com](http://www.a10networks.com).

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