



- Efficiency: Consolidated, Scalable Cloud Services in Compact 1U Hardware Appliance
- Scalability: 77 Gbps Throughput, Large-scale Virtualization
- Reliability: Maximum Uptime with Carrier Class Hardware

Data Center Ready Today, and Tomorrow

- Accelerate with SSL Offload, RAM Caching and Compression
- Advanced features with GSLB, aFlEX traffic control and aXAPI management
- Most comprehensive IPv6 transition and IPv4 preservation support
- Integrated security with WAF, AAM, DDoS protection, DNS Application Firewall and SSL Intercept
- No licensing fees for premium features

Cost-Effective Scalability

- Large-scale virtualization for multi-tenancy and consolidation
- Scale-up to 8x with Virtual Chassis (aVCS)
- Handle larger SSL key sizes (up to 4096-bit)
- 40 Gb port connectivity
- More processing power: Intel Xeon Octo-core CPUs
- No performance licenses

Application Optimization

- Optimize any application, including Microsoft SharePoint, Exchange, Lync, ADFS, Oracle, DNS, and more
- Improve Web server response times and reduce required servers

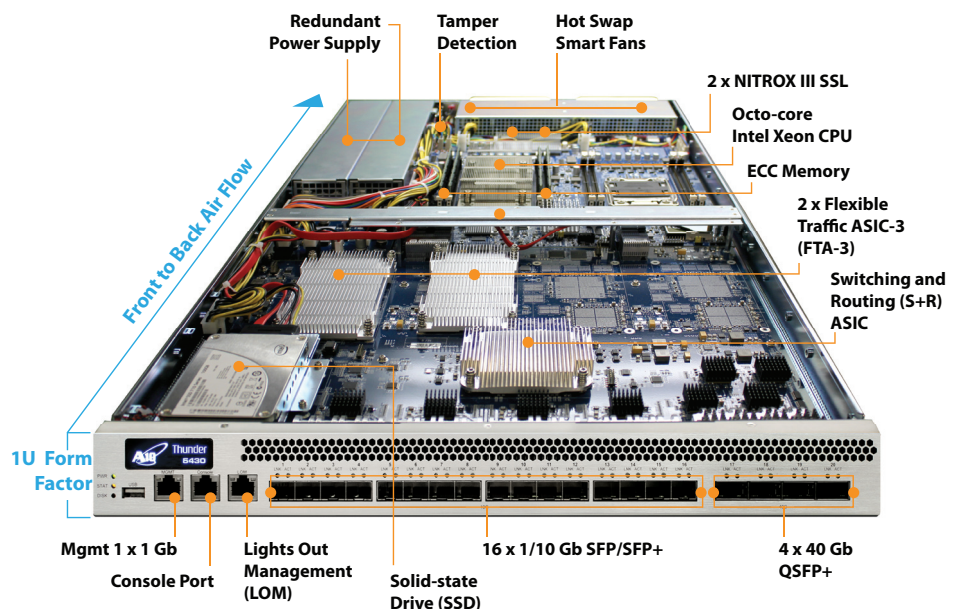
Built for Maximum Uptime

- 80 Plus "Platinum" efficiency Redundant Power Supply
- SSD (no spinning media)
- Error Correcting Code (ECC) memory
- Hot swap smart fans
- Application health checks

A10 Thunder 5430S is a 64-bit 1U Application Delivery Controller (ADC) that provides Unified Application Service Gateway functionality by consolidating premium solution modules for intelligent Cloud Services in the most efficient form factor. Built on A10's scalable and flexible Advanced Core Operating System (ACOS) architecture, A10 Thunder platforms consolidate stand-alone solutions such as ADCs, Server Load Balancers, Carrier Grade NAT (CGN/CGNAT), IPv6 Migration, DNS Application Firewall, Web Application Firewall (WAF), SSL Intercept, Distributed Denial of Service (DDoS) protection, Application Access Management (AAM), and more, without license fees.

A10 Thunder 5430S sets a new industry efficiency standard delivering 2.8 million Layer 4 connections per second (CPS) and 77 Gbps of application throughput in a 1U appliance. NITROX III SSL acceleration hardware delivers exceptional 2048-bit key performance with 67,000 SSL CPS. In addition, DDoS SYN Flood protection of 112 million SYN Cookies per second and concurrent session support of 256 million sessions deliver high performance per rack unit.

High-capacity and high-performance multi-tenancy with up to 1024 Application Delivery Partitions (ADPs) deliver large-scale virtualization and consolidation to enable more applications and services on a single platform, reducing deployment time and cost.



A10 Thunder 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
- aFeX – 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
- Database 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
- Web Application Firewall (WAF)
- Application Access Management (AAM)

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 (CLI)
- SNMP, Syslog, Email Alerts
- Port Mirroring
- REST-style XML API (aXAPI)
- LDAP, TACACS+, RADIUS Support


Virtualization

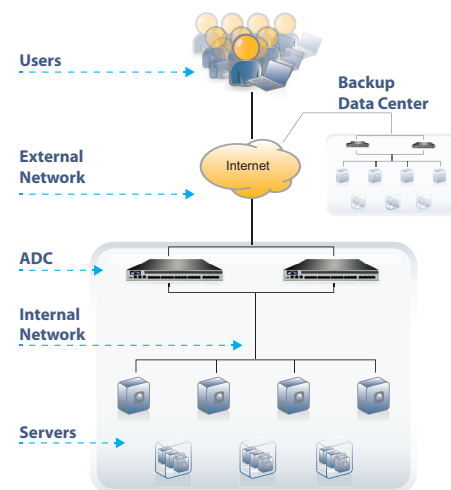
- aVCS (AX Virtual Chassis System)
- SoftAX Virtual Appliance for VMware vSphere, Citrix Xen and KVM options
- Multi-tenancy with Application Delivery Partitions (ADPs)
 - ◆ Role-based Administration (RBA)
 - ◆ Partition-based Management
 - ◆ L2/L3 Virtualization
- Hypervisor acceleration and management 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 Ports
- Tamper Detection
- Lights Out Management (LOM/IPMI)

A10 Thunder 5430S Appliance Summary

	
Processor	1 x Intel Xeon Octo-core
Hardware Acceleration	2 x FTA-3, L2/3 S+R ASIC, 2 x NITROX III SSL ASICs
Memory	64 GB of ECC RAM
Ethernet Interfaces	4 x 40-Gigabit ports (QSFP+), 16 x 1/10-Gigabit ports (SFP/SFP+)
Application Delivery Partitions (ADP) RBA/L3V	1024
Management Interface	1 Dedicated
Lights out Management	1 LOM/IPMI Interface
Console Port	1 Console Interface
Power Supply	Dual redundant 80 Plus "Platinum" efficiency (best-in-class) 100 – 240 VAC, Frequency 50 – 60 Hz
Max Power Consumption	550 W
Operating Temperature Range	0° – 40° C
Dimensions	1.75 in (H) x 17.5 in (W) x 30 in (D)
Unit Weight	34.6 lbs
Regulatory Certification	FCC Class A, UL, CE, TUV, CB, VCCI
Standard Warranty	90-day Hardware & Software



Application Delivery Landscape