A10 Thunder™ 1030S

Small Enterprise Unified Application Service Gateway

- Efficiency: Application Services On Demand
- Reliability: Maximum Uptime with Advanced Hardware
- Value: Lowest Cost Per Connection (CPS), Throughput and Session

Application Delivery

- Accelerate with SSL Offload, RAM Caching and more
- Advanced features with GSLB, aFleX traffic control and aXAPI management
- Optimize any application, including Microsoft SharePoint, Exchange, Lync, ADFS, Oracle, DNS, and more
- Improve Web server response times and reduce required servers
- No feature licensing fees

Security

- Web Application Firewall (WAF)
- DNS Application Firewall (DAF)
- Next-generation DDoS mitigation
- SSL Intercept (SI)
- Application Access Management (AAM) for pre-authentication

Cost-Effective Scalability

- Application Delivery Partitions (ADPs) for virtualization and multi-tenancy
- Scale-up to 8x with Virtual Chassis (aVCS)
- 10 Gb port connectivity
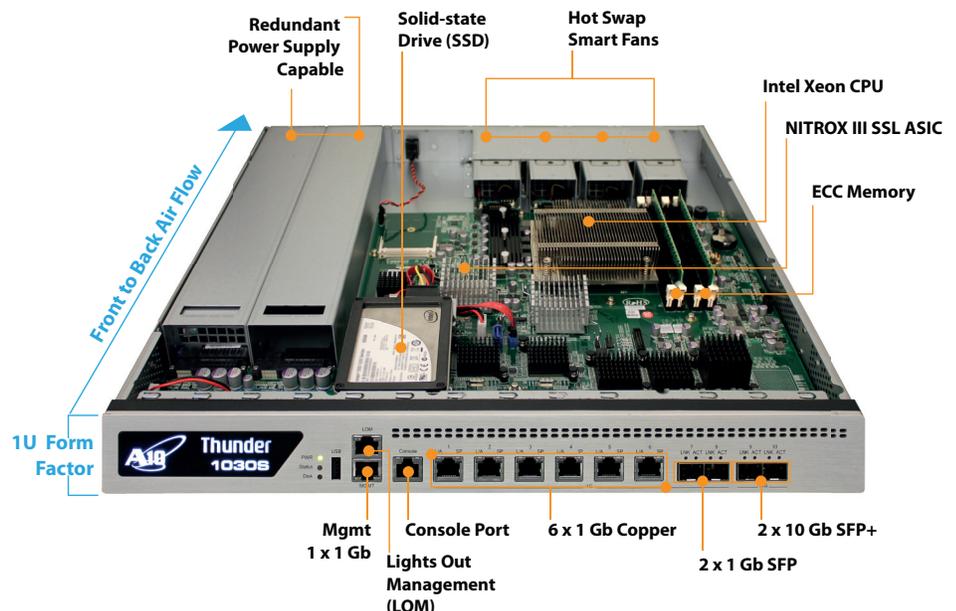- More processing power: Intel Xeon Quad-core CPU
- No performance licenses

Built for Maximum Uptime

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

The A10 Thunder 1030S is a Unified Application Service Gateway (UASG) that consolidates 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 Series platforms consolidate stand-alone solutions such as Application Delivery Controllers (ADCs), Server Load Balancers (SLBs), DNS Application Firewall (DAF), Web Application Firewall (WAF), SSL Intercept (SI), Distributed Denial of Service (DDoS) protection, Application Access Management (AAM), and more, without licensing fees.

A10 Thunder 1030S sets a new industry efficiency standard, delivering 450,000 Layer 4 connections per second (CPS) and 10 Gbps of application throughput, in a 1U appliance. NITROX III SSL acceleration hardware delivers exceptional 2048-bit key performance with 7,000 SSL CPS. Advanced hardware such as 10 Gbps ports provide high-performance connectivity for premium value.

High-capacity and high-performance multi-tenancy with up to 32 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.

Redundant Power Supply Capable • Solid-state Drive (SSD) • Hot Swap Smart Fans • Intel Xeon CPU • NITROX III SSL ASIC • ECC Memory • Front to Back Air Flow • 1U Form Factor • Mgmt 1 x 1 Gb • Console Port • Lights Out Management (LOM) • 6 x 1 Gb Copper • 2 x 1 Gb SFP • 2 x 10 Gb SFP+

Intelligent Cloud Services

A10 Thunder 1030S Features

Application Delivery
- 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
- SIP Load Balancing for VoIP
- 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

Application Acceleration
- HTTP Acceleration & Optimization
- HTTP Connection Multiplexing
- HTTP Caching
- HTTP Compression

Security
- Web Application Firewall (WAF)
- Next-generation DDoS protection
  - SYN Cookies
  - IP Anomaly Detection
  - L7 attack prevention
- Application Access Management (AAM)
- DNS Application Firewall (DAF)
- SSL Intercept (SI)
- 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
- Connection Rate Limiting/Connection Limiting

High Performance, Scalable Platform
- ACOS Operating System
  - Multi-core 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

IPv6
- Full native IPv6 management and feature support
- SLB-PT (Protocol Translation), SLB-64 (IPv4<->IPv6, IPv6<->IPv4)

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 (Virtual Chassis System)
- SoftAX Virtual Appliance (separate)
- 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 Supply option
- AC or DC Power Supplies
- Smart Fans (hot swap)
- Solid-state drive (SSD)
- 10 Gb, 1 Gb Ports
- Lights Out Management (LOM/IPMI)

Thunder 1030S			
Application Throughput	10 Gbps	SSL Acceleration ASIC	Yes
Layer 4 CPS	450k	Power Consumption (Typical/Max)	98 W / 108 W
SSL CPS (1024/2048)	25k / 7k	Heat in BTU/hour (Typical/Max)	334 / 369
Application Delivery Partitions (ADP) RBA/L3V	128 / 32	Performance Per Watt (PPW)*	4,167
Ethernet Interface		Power Supply (DC option available)	1 x 600 W**
1 Gb Copper	6		80 Plus "Platinum" efficiency, 100 to 240 VAC, Frequency 50 – 60 Hz
1 Gb Fiber (SFP)	2		
1/10 Gb Fiber (SFP+)	2	Cooling Fan	Hot Swap Smart Fans
40 Gb Fiber (QSFP+)	0	Dimensions	1.75 in (H), 17.5 in (W), 17.45 in (D)
Management Interface	Yes	Rack Units (Mountable)	1 RU
Lights Out Management	Yes	Unit Weight	18.0 lbs (1 PSU) │ 20.1 lbs (2 PSUs)***
Console Port	Yes	Operating Ranges	Temperature and Humidity 0° - 40° C / 5% - 95%
Solid-state Drive (SSD)	Yes	Regulatory Certifications	FCC Class A, UL, CE, TUV, CB, VCCI │ China CCC, BSMI, RCM (replace C-Tick), GOST-R, FAC
Processor	Intel Xeon Quad-core		
Memory (ECC RAM)	8 GB	Standard Warranty	90-day Hardware & Software

* Layer 4 CPS per Watt (Max)   │   ** Optional RPS available   │   *** With optional RPS