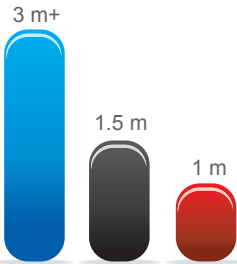




AX 5200



Performance



L4 CPS (Millions)

- AX 5200 – 2 RU
- Chassis Platform – 8 RU
- Chassis Platform – 7 RU

680 Watts
Max Power Consumption

AX 5200 Advanced Traffic Manager Redefining the Rules of the Performance Game New Generation Application Delivery for Data Centers

The A10 AX Series Advanced Traffic Manager platform represents a New Generation for Application Delivery. Since its launch in 2007, the AX Series has solved the problems of the world’s most demanding enterprises and service providers with application acceleration, availability and security.

With the introduction of the AX 5200, powered by the award-winning Advanced Core Operating System (ACOS), the rules of the performance game are changed. The AX 5200 constitutes the most advanced Application Delivery Controller (ADC) today, combining performance, high port density, energy savings and space savings.

Industry’s First Compact Application Delivery Controller Delivering an Unparalleled 3+ million L4 CPS

The AX 5200 delivers an unprecedented 3+ million Layer 4 connections per second (CPS), offering the industry’s highest performance in a groundbreaking compact 2U form factor. Within a single 2U appliance, the AX 5200 includes a full suite of application acceleration, optimization, load balancing, networking and security features that increase data center efficiency and lower energy and operational costs for the world’s largest carriers and Websites.

AX 5200 allows any data center to scale or consolidate to manage rapid and unpredictable growth. AX 5200’s compact platform represents a 3X space reduction compared to competitors’ latest chassis systems. Consolidation can be 10X or higher for legacy replacements.

Designed for Top Websites, Enterprises and Carriers

AX 5200 is tuned for the world’s most popular Web portals, Internet search vendors, eCommerce sites, and carriers. Customers processing millions of connections with gigabits of throughput can reduce management costs and increase performance. This ensures peace of mind during peak traffic cycles and rapid growth scenarios.

With the world’s highest-performance platform, the AX 5200 also solves complex networking challenges with innovative new features that advance the state of computing. For example, Network Address Translation (NAT) issues are solved by introducing Large Scale NAT (LSN) and IPv6 deployment is eased with IPv6-IPv4 Translation Server Load Balancing.

“The AX 5200 is part of a very small group of Application Delivery Platforms clearly targeted at the largest networks and Web properties in the world. The high throughput and performance are packaged in a very “green” energy efficient 2U platform, which will be extremely attractive to any customer concerned with data center power consumption.”

Jon Oltsik, Sr. Analyst for ESG



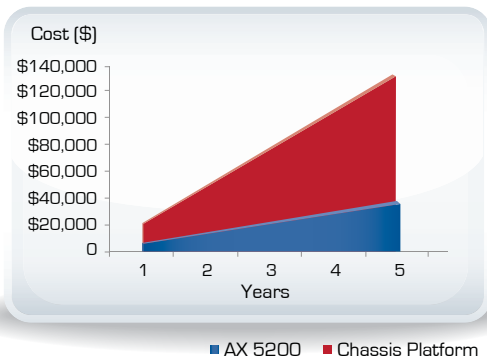
Unique: Purpose-built Hardware



Compact: More than 70% Rack Unit Reduction



Efficient: More than 70% Energy Reduction



Cumulative Energy Saving for 5 Pairs

64-bit ACOS - a New Generation Operating System

Leveraging A10's award-winning Advanced Core Operating System (ACOS) architecture, the AX 5200's custom hardware platform is tuned for record breaking performance.

- **64-bit ACOS Architecture:** ACOS was designed from the ground up to support 64-bit processing. ACOS utilizes the latest advances in multi-core, multi CPU processors, integrated high bandwidth memory controllers and new point-to-point processor interconnects to achieve industry leading performance in a compact form factor with low energy consumption. By eliminating the 4 GB memory limitation of 32-bit architecture, ACOS allows unprecedented scalability for all features such as Layer 4/Layer 7 sessions, RAM Caching and more.
- **Parallel Flexible Traffic ASIC (PFTA):** The AX 5200 introduces a new PFTA architecture for exponentially faster application acceleration. Over 3 million connections per second are possible through multiple FTA processors, which optimize traffic flow to each of the CPUs and offer protection against DDoS attacks such as SYN floods.
- **Industry-leading Deep Packet Inspection (DPI) Engine:** ACOS powered DPI processing for customized Layer 7 traffic management can result in 20-50% processor overhead reduction. This enables customizations to support business goals, ensuring sites always remain responsive and effective without network performance degradation.

Additional hardware highlights include:

- The latest Intel Nehalem 64-bit multi-core, hyper-thread processors
- 3+ million Layer 4 connections per second (CPS) and 40 Gbps application throughput
- High-density interfaces: 16 x 10 Gb ports and 4 x 1 Gb ports
- Serial console and Ethernet management interface
- Solid-state Drive (SSD) and Compact Flash
- Maximum power consumption: 680 Watts
- Compact 2U platform with superior air flow and heat dissipation
- Redundant Power Supply (RPS) and removable smart fan trays

Environmental Sense is Business Sense

The AX 5200 platform showcases the intersection of business goals and green initiatives: power consumption can be vastly reduced without performance sacrifice. Providing 4412 Layer 4 connections per second per Watt in a 2U appliance, the AX 5200 can vastly optimize transactions per Watt, by a factor of 10X, while also reducing data center cooling requirements.

For the green conscious, the carbon footprint and energy reduction can be in excess of 70%, which can translate to over 12 metric tons of carbon dioxide (CO₂) being eliminated, per pair, per year.

Virtualization
Cloud Computing
Service Oriented Architecture
Data Center Consolidation

“

- 68% rated energy efficiency as “top of mind”
- 51% said their organization’s approach to green was directly tied to the cost savings it could provide

Source: IDC IT Executives Poll/ Green IT Forum 2009

”

Translation Server Load Balancing



AX 5200 versus 7 RU Chassis Platform: Save over \$2 Million on a 200 Gbps Deployment

AX 5200 delivers extreme cost savings for a large data center. For example, a data center requiring 200 Gbps of throughput, using 5 pairs, can save over 2 million dollars in the first year versus expensive chassis based systems, even without calculating extra data center cooling costs and the overhead of housing extra rack units.

While chassis systems can be more than 2X the price for the upfront purchase, they can also consume energy at higher rates. The AX 5200 can reduce electricity bills by 3.5X.

Innovative and Feature Rich

The AX 5200 is a feature-rich platform with all-inclusive pricing. Whether organizations are deploying service oriented architectures, virtualized environments or executing on cloud computing initiatives, the AX 5200 is a key enabler. Platform features include:

Availability

- Layer 2 Switching and Layer 3 Routing ASIC
- Feature-rich Server Load Balancing
- aFleX Layer 7 TCL scripting for Deep Packet Inspection and traffic management
- Global Server Load Balancing (GSLB)
- High Availability
 - Active-active
 - Active-standby

Acceleration and Optimization

- RAM caching - static or dynamic
- SSL offload to ASIC hardware
- HTTP compression with hardware ASIC option

Advanced Networking

- IPv4 & IPv6 load balancing and management
- Advanced NAT options

Virtualization

- Virtual stack management
- Role based management
- Partition based management

Security

- Hardware SYN flood protection (30+ million per second)
- Policy-based Server Load Balancing
- Selective Connection and Rate Limiting
- Anomaly Protection

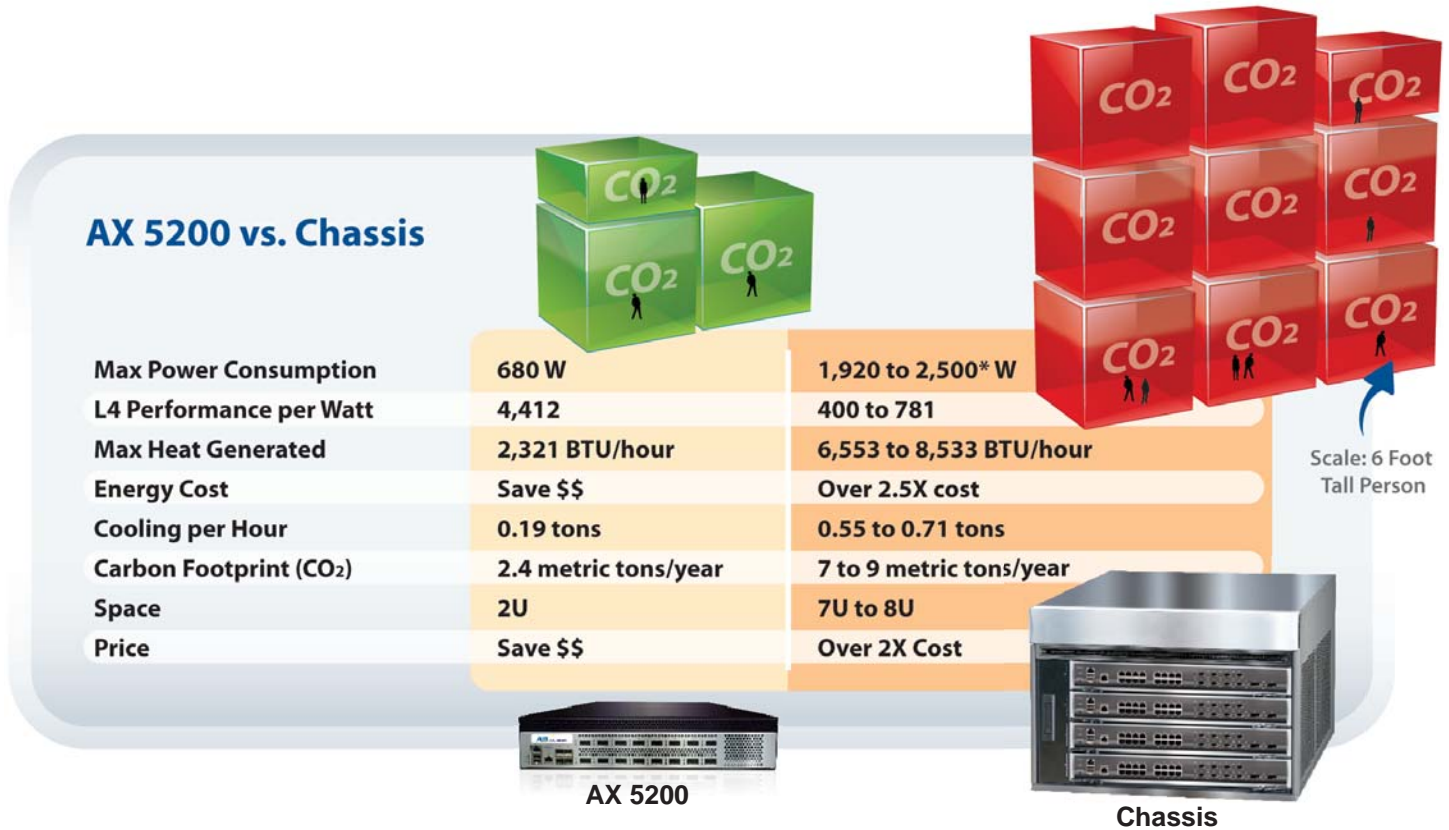
Flexible Management

- aXAPI REST based XML API for flexible and custom administration
- Full Web interface or industry standard command line interface

Advanced Technology for Imminent Problems

Full IPv4 & IPv6 administration and traffic management capabilities are built into all AX appliances. The AX 5200 raises the bar with new high performance IPv6/IPv4 Protocol Translation services. Translation Server Load Balancer technologies enable deployment of IPv6 clouds, with IPv4 ↔ IPv6 networks interoperating seamlessly.

Additional new features include Dual-Stack Lite (DS-Lite) and Large Scale NAT (LSN), also known as Carrier Grade NAT (CGN), which further increase flexibility. LSN improves Network Address Translation (NAT) services, either as a networking option or in a load balancing scenario. LSN eliminates NAT compatibility issues, enabling applications to function as intended.



Faster

40 Gbps Throughput
3+ million Layer 4 CPS
DDoS: 30 million SYN/sec

Better

Innovative Features
Compact 2U Platform
Latest 64-bit Architecture
ASIC Hardware
Solid-state Drive

Greener

70%+ Saving on Electricity/year
6+ Metric Tons Less CO₂/year
10X Layer 4 Performance per Watt

* Estimated

Scale and Simplify Today

Please contact A10 Networks or an authorized reseller for more information.

