



Service Gateway

Carrier-class, 25 Gbps, DPI-based platform for enhanced service optimization and profitable service deployment



Built to AdvancedTCA® standards and based on Allot's leading Layer-7 deep packet inspection (DPI) engine, the Allot Service Gateway provides an open, carrier-grade solution for broadband service providers to manage multiple 10-Gigabit lines and deploy value added services on one integrated platform.

- Manage 10-Gigabit traffic volumes intelligently and efficiently
- Deliver revenue-generating value added services
- Maintain a quality user experience
- Reduce the cost and complexity of service deployment
- Protect investment in infrastructure



Allot Service Gateway – Omega Series

The Allot Service Gateway Omega Series is a carrier-grade, highly scalable platform for enhanced broadband service optimization based on DPI. The platform delivers high performance, reliability, application awareness and subscriber awareness, which are key components for implementing solutions to control infrastructure and operating costs, and for deploying value added services to increase total and per-subscriber revenues (ARPU).

Traffic flows are inspected by the Service Gateway's powerful DPI engine which directs the traffic to the relevant services and actions, depending on the defined policy for the application and/or the subscriber. Furthermore, integration of value added services in a single platform enhances operating efficiency and requires a much smaller footprint compared to alternative solutions based on single-purpose appliances.

Feature Highlights

- **Carrier-grade design**
Engineered to AdvancedTCA® standards for deployment in service provider networks; NEBS level 3 compliant
- **Open architecture**
Standard interfaces, protocols and APIs facilitate integration of value-added services
- **High availability**
N+1 redundancy on hot-swappable blades; hardware/software bypass protects against failures on Ethernet interfaces/Flow Processors and enables upgrade and maintenance with no downtime
- **High performance**
Supports throughput of up to **25 Gbps** with up to **4 x 10-Gigabit Ethernet interfaces** (2 x 10-Gigabit Ethernet lines) and up to 20 million concurrent IP flows
- **High scalability**
Modular blades provide incremental capacity from 5 to 25 Gbps and ongoing functionality and service upgrades on the same platform
- **Powerful DPI engine**
Provides Layer 7 application awareness, network intelligence and visibility to all services in the Gateway
- **Subscriber awareness**
Fully integrated with Allot Subscriber Management Platform (SMP)
- **Core services**
Real-time monitoring and reporting, traffic trend analysis, policy management, service tiering, QoS prioritization and optimization
- **Centralized management**
Fully integrated with Allot NetXplorer management system

Specifications

The Service Gateway Omega Series platform comprises an AdvancedTCA chassis with a management blade and a minimum of one Core Controller, one Bypass, and two Flow Processor blades.

Omega Series Platform

Platform Configuration	
Chassis	14-slot, AdvancedTCA (ATCA)
Maximum Available Slots	13 (1 reserved for management)
Flow Processor Blade (SGFP)	Up to 5 (blade occupies one slot)
Core Controller Blade (SGCC)	Up to 2 (blade occupies two slots)
Bypass Blade (SGBP)	Up to 2 (blade occupies one slot)
Value Added Service Blade	Up to 2 (blade occupies one slot)
Capacity	
Throughput	Up to 25 Gbps
Number of Connections / Flows	Up to 10,000,000 / 20,000,000
Number of Subscribers	Up to 800,000
Number of Pipes / Virtual Channels	Up to 200,000 / 400,000
Interface Types	
Ethernet Interfaces	Up to 4 x 10 Gigabit Ethernet SR/LR/ER
Management	2 x 10/100/1000 BaseT
Console	Serial, RJ45 Connector
Interface and Throughput Options	
10-Gigabit Ethernet Port	2/4
Service Gateway Throughput (with 2 x 10 GE ports)	4,8,12,16,20 Gbps
Service Gateway Throughput (with 4 x 10 GE ports)	5,10,15,20,25 Gbps
Availability	
Hardware Bypass	Independent (passive) blade for each Core Controller
Redundancy for Flow Processor Blades	N+1
Software Bypass	Independent bypass mechanism for every SGFP in case of double SGFP fault
System	Full redundancy for all system components, PSUs, fans, etc.
Maintainability	
Hot Swap	Supported for SGFP, SGCC, SGBP and VAS blades
Internal Bypass	Available for all SGFP blades
Allot Product Compatibility	
Allot NetXplorer Centralized Management Server	Version NX7.5.0 and up
Allot NetXplorer Collector	Version DC7.5.0 and up
Allot Subscriber Management Platform	Version SMP7.3.0 and up
Dimensions	
Size	Standard 13U by 19" rack mount
Weight	Up to 50 kg in full configuration
AC Power Supply Size (all 3 PSUs)	Standard 1U by 19" rack mount
Power Supply Unit (PSU)	
Input DC	Internal -48V, 2.1 kW (in full configuration)
Number of DC PSUs	2
DC PSU Redundancy	1+1
Input AC	External 100 – 240VAC, 2.1 kW (in full configuration)
Number of AC PSUs	3
AC PSU Redundancy	2+1
Standards	
NEBS	Level 3
AdvancedTCA	Full compliance



Specifications (continued)

Core Controller Blade (SGCC)

Capacity	
Throughput	20 Gbps
Number of Connections / Flows	10,000,000 / 20,000,000
Interface Types	
Ethernet Interfaces	2 x 10-Gigabit Ethernet SR/LR/ER
Management	2 x 10/100/1000 BaseT
Console	Serial, RJ45 Connector
Availability	
Hardware Bypass	Independent (passive) blade
Hot Swap	Supported
Dimensions and Power	
Size of Core Controller	Standard 2-slot ATCA blade
Size of Bypass for Core Controller	Standard 1-slot ATCA blade
Dissipation	300W
Standards	
NEBS	Level 3
AdvancedTCA	Full compliance

Flow Processor Blade (SGFP)

Capacity	
Throughput	Up to 5 Gbps
Number of Connections / Flows	2,000,000 / 4,000,000
Pipes / Virtual Channels	40,000 / 80,000
Number of Subscribers	160,000
Interface Types	
Management	2 x 10/100 BaseT
Console	Serial, RJ45 Connector
Availability	
Redundancy	N+1
Software Bypass	Independent for each blade
Hot Swap	Supported
Dimensions and Power	
Size of Flow Processor	Standard 1-slot ATCA blade
Dissipation	150W
Standards	
NEBS	Level 3
AdvancedTCA	Full compliance

About Allot Communications

Allot Communications (NASDAQ: ALLT) is a leading provider of intelligent IP service optimization solutions for DSL, wireless and mobile broadband carriers, service providers, and enterprises. Allot's rich portfolio of hardware platforms and software applications utilizes deep packet inspection (DPI) technology to transform broadband pipes into smart networks that can rapidly and efficiently deploy value added Internet services. Allot's scalable, carrier-grade solutions provide the visibility, application control and subscriber management that are vital to managing Internet service delivery, guaranteeing quality of experience (QoE), containing operating costs, and maximizing revenue in broadband networks. For more information, visit www.allot.com.

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