

Allot Multiservice Platforms

Service Gateway 9000 Series



Empowering Rapid Deployment of Service Innovation

Efficient roll out of value-added consumer and business services is key to accelerating service adoption and generating new revenue streams. Allot Service Gateway 9000 Series is a scalable family of DPI-based multiservice platforms whose small footprint is uniquely designed to power the rapid deployment of differentiated services in fixed, mobile and converged data networks and to lower your total cost of ownership.

Benefits

- Powerful and cost-efficient multiservice delivery platform
- Small-footprint appliances
- Scalable throughput
- High-density 1/10 Gigabit Ethernet connectivity
- Real-time Layer-7 application visibility of encrypted traffic, policy enforcement, charging

- Supporting network-based Security as a Service
- Deployment and management across any access
- Easy installation and pay-as-you-grow scalability



Single Point of Service Integration

Allot Service Gateway 9000 Series powers Allot's growing portfolio of value-added services including:

- Allot NetworkSecure (Security VAS for consumers and businesses)
- Allot ServiceProtector (DDoS protection and anti-bot)
- Allot ContentProtector (URL filtering)
- Allot SpamOut Protector (anti-spam service)

Each platform also supports real-time traffic steering to third-party applications or virtualized services with seamless service chaining. As a single point of integration for these services, Allot helps you minimize interoperability and service integration issues to facilitate fast and efficient service rollout.

Efficient Performance

Allot Service Gateway 9000 Series packs rich functionality in efficient, small-footprint appliances. High-density 1/10 Gigabit Ethernet connectivity and scalable throughput help you keep pace with the demand for high-quality network-based services in a cost-efficient manner.

Future-Proof Scalability

Start small and expand seamlessly with pay-as-you-grow deployment that reduces initial capital outlay and allows operators to respond quickly to market changes. Each appliance offers a range of capacity, connectivity and throughput options plus the ability to cluster appliances to provide aggregate throughput.

Central management and configuration of Allot platforms and services is provided by Allot NetXplorer Management system in conjunction with Allot Subscriber Management Platform (SMP).

Efficient Clustering

Allot maintains accurate Layer-7 visibility and control of user-application traffic across multiple platforms even when asymmetric upstream and/or downstream IP flows are processed by different appliances. Clustering of up to eight platforms utilizes dedicated interfaces with very low synchronization traffic overhead.

Accurate Traffic Visibility and Policy Control

Allot's Dynamic Actionable Recognition Technology (DART) engine, embedded in the platform, gives you granular visibility of application, user, device, quality-of-experience (QoE) and network topology traffic. Allot's extensive signature library accurately identifies hundreds of Internet applications and protocols, and also supports user-defined signatures. Frequent and automated updates to the signature library keep Allot Service Gateways up to date with the latest applications and Internet developments, ensuring accurate traffic detection and classification.

Moreover, Allot's flexible and powerful Policy Editor makes it easy for you to provision and enforce real-time Quality of Service (QoS), steering, metering and charging policy with equal granularity.

Encrypted Traffic Classification

Allot's superior traffic classification proactively learns and adapts to the changing tactics of traffic encryption that is widely used by Internet services and data privacy applications. From heuristic analysis of IP flow behavior to peer learning and predictive DPI, Allot's synergy of inspection methods provides highly granular and accurate recognition of encrypted traffic even at maximum speeds and peak loads.

Intelligent Policy and Charging Enforcement

Compliance with 3GPP standards enables Allot SG-9500 to provide intelligent Traffic Detection Function (TDF) and Policy and Charging Enforcement Function (PCEF) in 3G/4G mobile data networks. This allows operators to leverage superior traffic identification and classification to enrich the policy decisions of PCRF elements, and to enhance the charging capabilities of online and offline charging systems (OCS, OFCS).

Collecting Network Data Records

From their vantage point in your network, Allot 9000 Series platforms collect and export a rich variety of high-resolution usage data, including real-time transactions per user, per application, per device, per video session, per VoIP and Instant Messaging session, per Web session, and more. Network data records may be exported in standard formats to business intelligence systems, such as Allot ClearSee Network Analytics, and other operator systems for further manipulation and analysis. Frequency and triggers for data record export are configurable parameters, giving operators ready access to usage data that is critical to their business. Network data records are configurable and may be customized by Allot Data Science Services for any destination or use case requirements.

Allot Service Gateway 9000 Series Appliances

	Allot SG-9008	Allot SG-9100	Allot SG-9500
Capacity *			
Throughput per Platform	8 Gbps	50 Gbps	140 Gbps
Throughput per Cluster of 8 devices	60 Gbps	350 Gbps	1 Tbps
Number of Connections/Flows	3,000,000/ 6,000,000	12,000,000/ 24,000,000	36,000,000/ 72,000,000
Number of Active Subscribers	360,000	1,500,000	4,500,000
Number of Lines/ Pipes/Virtual Channels	512/250,000/500,000	512/1,000,000/2,000,000	512/2,400,000/4,800,000
Standards			
Ethernet Interfaces	Up to 8 x 1 GE Copper (RJ45)	Up to 12 x 1GE/10GE (SFP+) 10GBASE-SR/LR 1GBASE-LX/SX (Dual rate) 1 GE Copper (RJ45)	Up to 24 x 1GE/10GE (SFP+) 10GBASE-SR/LR 1GBASE-LX/SX (Dual rate) 1 GE Copper (RJ45)
Management	2 x 1 Gigabit Ethernet (Copper)	2 x 1 Gigabit Ethernet (Copper)	2 x 10 Gigabit Ethernet or 2 x 1 Gigabit Ethernet
Networking Standards			
Tunnel and Encapsulation Support	Including L2TP v1/2, MPLS, PPPoE, GRE, GTP, 6rd, Teredo, SNAP, DS-Lite/MAP-E		
IP Version	IPv4, IPv6		
Access Technology Support	2G, 3G, 4G/LTE, CDMA, DOCSIS, WiMAX, DSL, FTTx, PON		
Product Options			
Network Analytics	Real-time/Long-Term Monitoring and Reporting		
High Availability	Active redundancy (1:1, 1+1), Bypass		
Asymmetric Traffic Control	Yes		
Physical Characteristics			
Form Factor	1U 19" rack mount	1U 19" rack mount	2U 19" rack mount
Size	4.29 x 43.46 x 70.7 cm	2 x 1 Gigabit Ethernet	8.73 x 4.45 x 73.02 cm (3.44 x 17.54 x 28.75 in), without Bezel
Weight	13.04 kg	Min: 13.5 kg (29.8 lb) Max: 21.0 kg (46.3 lb)	Min 32.6 lb (14.759 kg), Max 42 lb (19 kg) per number of NIC interfaces
Power (PSU input/output)	100 to 120 VAC ,200 to 240 VAC, 500W Heat Dissipation: 1979 BTU/hr (at 100 VAC), 1911 BTU/hr (at 200 VAC), 1965 BTU/hr (at 240 VDC) for China Only	Dual Hot Plug, Redundant 100/240VAC, 80PLUS, 750W	Dual Hot Plug, Redundant 100/240VAC or -48VDC, efficiency of up to 94%, Energy star, 80PLUS, 800W
Operating Temperature/Environment	10° to 35°C (50° to 95°F), Relative humidity (RH%) 8% to 90% 28°C maximum wet bulb temperature, non-condensing.	10°C to 35°C (50°F to 95°F), Relative humidity (%RH) 8% to 80% Max Altitude 3,048 m	10°C to 35°C (50°F to 95°F), Relative humidity (%RH) 8% to 90%

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Availability			
System Redundancy	Redundancy for PSUs and fans (PSU optional on SG-9008)		
Hardware Bypass	Independent, passive bypass unit		
Bypass Configuration (up to)	One unit, 8 copper ports (4 links)	Two units, 8 fiber-optic ports (4 links), or Two units, 8 copper ports (4 links), or One unit, 16 fiber-optic ports (8 links)	Two units, 8 fiber-optic ports (4 links), or Two units, 8 copper ports (4 links), or One unit, 16 fiber-optic ports (8 links), or One unit, 24 fiber-optic ports (12 links)
HD-8 Multi-Port Bypass Unit	External 1U 19" rack mount, 2.44kg (5.38lb)		
HD-16 Multi-Port Bypass Unit	External 1U 19" rack mount, 2.64kg (5.82lb)		
HD-24 Multi-Port Bypass Unit	External 1U 19" rack mount, 2.86kg (6.3lb)		
Standards Compliance			
Safety	UL 60950-1, 2nd Edition, 2014-10-14 CAN/CSA C22.2 No. 60950-1-07 EN60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013 EN 62479:2010 CB IEC 60950-1:2005+AMD1:2009+AMD2:2013 AS/NZS 60950.1: 2015 part 1 BIS IS 13252(PART1):2010	UL 60950-1:2006+A1:2010+A11:2009+A12:2011+A2:2013 EN60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	
EMC (Electromagnetic Compliance)	EN55032:2012 Class A EN 55024:2010. EN 61000-3-2:2014 EN 61000-3-3:2013 FCC CFR 47 Part 15 Sub B Canada ICES-003 Issue 6 VCCI -03/2015.04 CISPR 32:2012 TCVN7189:2009 CCC GB17625.1-2012,GB4943.1-2011,GB/T9254-2008 Class A	EN 55022:2010+AC:2011(Class A) EN55032:2012/AC:2013 EN 55024:2015 EN 61000-3-2:2014 EN 61000-3-3:2008 FCC CFR 47 Part 15 Sub B Canada ICES-003 Issue 5 VCCI V-3/2013.04 (member ID:1798 [C3775, R-3404, T1630]	
Environmental	RoHS/WEEE compliance China ROHS REACH EU 1907:2006	RoHS/WEEE compliance China ROHS REACH EU 1907:2006	

* Actual throughput and performance metrics depend on enabled features, policy configuration, traffic mix, and other deployment characteristics.