Allot Multiservice Platforms

Service Gateway 9700

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 9700 is the most powerful appliance in our SG-9000 series of scalable, 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 appliance
- 300 Gbps per appliance
- High-density 1/10/100 Gigabit Ethernet connectivity
- Real-time Layer-7 application visibility of encrypted traffic, policy enforcement, charging
- Supporting network-based Security VAS
- Deployment and management across any access
- Easy installation and pay-as-you-grow scalability

Features

Single Point of Service Integration

Allot Service Gateway 9700 (SG-9700) powers Allot's growing portfolio of value-added services including:

- Allot NetworkSecure (Security VAS for consumers and businesses)
- Allot DDoS Secure (DDoS protection and anti-bot)
- Allot SmartSentinel (URL filtering)

The 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 9700 packs rich functionality in efficient, small-footprint appliances. High-density 1/10/100 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.

- **Capacity:** supports up to 9 million active subscribers (concurrently attached and active), and 144 million concurrent IP flows
- **Throughput:** up to 300 Gbps in a single platform
- **Clustering:** supports up to ten Allot SG-9700 platforms in a seamless cluster configuration providing aggregate throughput of up to 2 Tbps
- **Central Management** and configuration by Allot NetXplorer Management system, including full integration with Allot Subscriber Management Platform (SMP)

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-9700 to provide intelligent Traffic Detection Function (TDF) and Policy and Charging Enforcement Function (PCEF) in 3G/4G/5G 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 Service Gateway 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 easily customized by Allot Data Science Services for any destination or use case requirements.

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	Allot SG-9700		
Capacity (Throughput and performance metrics depend on enabled features, policy configuration, traffic mix, and other deployment characteristics.)			
Throughput per Platform	300 Gbps		
Number of Connections/Flows	72,000,000/ 144,000,000		
Number of Active Subscribers	9,000,000		
Number of Lines / Pipes / Virtual Channels	512/4,800,000/9,600,000		
Standards			
Ethernet Interfaces	**Configuration A** **40 ports of 10GE** (8QSFP+with breakout cables) *10GBASE-SR/LR*	**Configuration B** **8 ports of 100GE** (QSFP28): *100GBASE-SR4/LR4* *Plus* **8 ports of 1GE /10GE** (SFP+): 1GBASE-LX/SX 1 GE Copper (RJ45) 10GBASE-SR/LR	**Configuration C** **4 ports of 100GE** (QSFP28): *100GBASE-SR4/LR4* *Plus* **24 ports of 1GE /10GE** (SFP+): 1GBASE-LX/SX 1 GE Copper (RJ45) 10GBASE-SR/LR
Management	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, 5G, 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	2U 19" rack mount		
Size	8.73 x 44.54 x 67.94 cm (3.44 x 17.54 x 26.75 in), without Bezel		
Weight	Min 32.75 lb (14.9 kg), Max 43 lbs (19.5 kg) per number of NIC interfaces		
Power (PSU input/output)	Dual Hot Plug, Redundant 100/240VAC or -48VDC, efficiency of up to 94%, Energy star, 80PLUS 800W 3207 BTU/hr (at 100 VAC), 3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC) for China only		
Operating Temperature/Environment	10°C to 35°C (50°F to 95°F) Relative humidity (%RH) 8% to 90%		

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	Allot SG-9700
Availability	
System Redundancy	Redundancy for PSUs and fans
Hardware Bypass	Independent, passive bypass unit
Bypass Configuration (up to)	One unit, 8 copper ports (4 links) or, Two units, 8 LC-LC MM/SM fiber-optic ports (4 links), or Two units, 16 LC-LC MM/SM fiber-optic ports (8 links), or Two units, 24 LC-6 MTP MM/SM fiber-optic ports (12 links), or Two units, 4 MTP-MTP MM fiber-optic ports (2 links of SR4 100G)
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	UL60950 CE CB
EMC (Electromagnetic Compliance)	FCC CE VCCI ICES
Environmental	RoHS, China ROHS WEEE REACH

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