

Allot Service Gateway 9100R

Empowering Rapid Deployment of Service Innovation



Efficient rollout of value-added consumer and business services is key to accelerating service adoption and generating new revenue streams.

Allot Service Gateway SG-9100R is the most compact appliance in our SG-9000 series of scalable, DPI-based multiservice platforms, with a small footprint uniquely designed to enable 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
- Up to 150 Gbps per appliance*
- High-density 1/10/25 Gigabit Ethernet connectivity
- Real-time Layer-7 application visibility of encrypted traffic, policy enforcement, and charging
- Supports network-based Security VAS
- Deployment and management across any Access Network
- Easy installation and pay-as-you-grow scalability

Single Point of Service Integration

Allot Service Gateway 9100R (SG-9100R) powers Allot's growing portfolio of value-added services, including:

- Allot NetworkSecure (Security VAS for consumers and small 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, facilitating a fast, efficient service rollout.

Efficient Performance

Allot Service Gateway 9100R packs rich functionality in efficient, small-footprint appliances. High-density 1/10/25 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, reducing initial capital outlay and enabling operators to respond quickly to market changes.

- Capacity: supports up to 2.5 million active subscribers (concurrently attached and active), and 72 million concurrent IP flows
- Throughput: up to 150 Gbps in a single platform
- Central Management and configuration by Allot NetXplorer Management system, including full integration with Allot Subscriber Management Platform (SMP)

Encrypted Traffic Classification

Allot's superior traffic classification proactively learns and adapts to the changing tactics of traffic encryption that are 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 delivers highly granular, accurate recognition of encrypted traffic even at maximum speeds and peak loads.

Accurate Traffic Visibility & Policy Control

Allot's Dynamic Application Recognition Technology (DART), an AI-powered engine embedded in the platform, provides granular visibility into application, user, device, quality-of-experience (QoE), and network topology traffic, even with fully encrypted traffic (ECH). Allot's extensive signature library accurately identifies thousands of Internet applications and protocols and 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.

Intelligent Policy and Charging Enforcement

Compliance with 3GPP standards enables Allot SG-9100R to provide intelligent traffic detection functions, policy, and charging enforcement functions in 3G/4G/5G mobile data networks. This allows operators to leverage superior traffic identification and classification to enrich the policy decisions of PCRF (PCF in 5G) 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. The frequency and triggers for data record export are configurable parameters, giving operators ready access to critical usage data. Network data records are configurable and can be easily customized by Allot Data Science Services for any destination or use-case requirements.

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Capacity (Throughput and performance metrics depend on enabled features, policy configuration, traffic mix, and other deployment characteristics.)	
Throughput per Platform	Up to 150 Gbps*
Number of Connections / Flows	36,000,000/72,000,000
Number of registered Users / Subscribers	2,500,000
Number of Active Lines / Pipes / Virtual Channels	10,000/1,800,000/4,500,000
Number of static Lines / Pipes / Virtual Channels	512/5,000/15,000
Standards	
Ethernet Interfaces	22 ports of 1/10/25** GE 1GBASE-T, 1GBASE - SX/LX, 10GBASE - SR/LR, 25GBASE -SR/LR** (SFP28)
Management	2 x 1/10 Gigabit Ethernet
Networking Standards	
Tunnel and Encapsulation Support	Including L2TP v1/2, MPLS, PPPoE, GRE, GTP, 6rd, Teredo, SNAP, DS-Lite/MAP-E and others
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	8.68 x 48.20 x 80.23 cm (3.42 x 18.98 x 31.59 in), with Bezel
Weight	25.5 kg (56.2 lbs)
Power (PSU input/output)	AC - 1100W Titanium 100-240VAC, Hot-Plug MHS, dual redundant (1+1) power supply DC - 1500W Titanium -48V DC, Hot-Plug MHS, dual redundant (1+1) power supply
Operating Temperature/Environment	10°C to 35°C (50°F to 95°F) Relative humidity (%RH) 8% to 90%

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

** 25GBASE support is planned for 2027