

Service Gateway 9000 Series

Delivering Complete Network Intelligence

Visibility, Control, and Security for the Enterprise

Network service performance and application delivery assurance are critical to user satisfaction and business success.

The Allot Service Gateway 9000 (SG-9000) series enables your IT, network and security teams to assure and protect network services and application delivery.

Seamlessly integrated into enterprise networks, the SG-9000 provides centralized traffic management and QoE based application control for high levels of user satisfaction, network hygiene, a reduced attack surface, and bot and DDoS mitigation for higher levels of protection.

Together with business analytics, the SG-9000 enables you to see and understand everything that is happening on your company network. As a result, you can act faster and more decisively to make any size network operate better, faster, and more safely.



With hundreds Gbps performance the SG-9000 can be placed at central network junctions, providing visibility, control and security across the WAN, datacenter LAN and Internet.

These multi-service platforms enable medium and large enterprises, MSPs, datacenter and cloud service providers to ensure that the network is optimized to best meet business requirements.

Benefits

- Assures and protects network service and application delivery
- Empowers informed, data-driven decisions with business analytics (e.g., making infrastructure investments and upgrades where and when they are needed)
- Allows you to know and control everything that is on your network
- Provides control of recreational traffic and prevents abuse of corporate resources
- Identifies and solves problems before they escalate with real-time traffic monitoring for increased operational efficiency
- Identifies and manages apps and devices that create potential security risks
- Delivers high capacity for demanding environments
- Supplies high-density 1/10/25/100 Gigabit Ethernet connectivity
- Easy installation and pay-as-you-grow scalability

AI-Driven Detection Engine for Accurate Traffic Visibility and Policy Control

The SG-9000 Dynamic Actionable Recognition Technology (DART) engine, blends deep network intelligence with built-in AI to give you a clear and detailed picture of what's happening in your network. You get visibility down to the application, the user, the device, the QoE level and even the traffic paths across your topology.

The platform's rich signature library identifies hundreds of apps and protocols with high accuracy, and you can easily extend it with your own definitions. Continuous, automated updates keep Allot Service Gateways aligned with new applications and traffic behaviors so classification stays sharp and reliable.

On top of that, the Policy Editor gives you a simple way to prioritize business-critical apps and enforce real-time Quality of Service (QoS).

Encrypted Traffic Classification

With superior traffic classification, Allot appliances proactively learn and adapt to the changing tactics of traffic encryption widely used by internet services and data privacy applications. From heuristic analysis of IP flow behavior to peer learning and predictive DPI, Allot's synergistic range of inspection methods provides and accurate recognition of encrypted traffic, even during peak loads.

Maintaining Network Hygiene

In the era of BYOD, shadow IT, and the use of unsanctioned apps, security is a major concern for IT staff. The Allot SG-9000 series allows you to monitor recreational and risky traffic that can compromise enterprise business apps. For example, you can prevent network abuse in the following ways:

- Allocate quotas for employees to limit the downloading of subscriber VOD, such as Netflix
- Deny the use of private VPNs that can be used to circumvent security controls
- Deny the running of peer-to-peer apps that pose a liability for pirated content and can introduce malware with "license-free" software
- Identify apps, such as crypto-mining, that possibly indicate a compromised server or abuse of corporate resources.

Collecting Network Data Records

From their vantage point on your network, Allot Service Gateway platforms collect and export a rich variety of high-resolution usage and performance data, including real-time activity per user, per application, per device, per VoIP & video 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 systems, such as SIEM systems for further security analysis. Furthermore, datacenter and cloud service providers can validate network SLAs in addition to providing analytics as a service. Frequency and triggers for data record export are configurable parameters, providing ready access to critical usage data. Network data records are configurable and easily customized by Allot Data Science Services for any destination or use case requirements.

Single Point of Service Integration

In addition to industry-leading DPI-based visibility and control, the Allot SG-9000 series supports the growing portfolio of value-added services from Allot, including:

- Network & Services Resilience - NSR, which provides DDoS protection and anti-Botnet services.
- 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 SG 9000 series appliances pack rich functionality into efficient, small- footprint components. High-density 1/10/25/100 Gigabit Ethernet connectivity and scalable design allow the IT department to keep pace with the demand for high- quality network-based services in a cost-efficient manner.

Supports SME to Large Enterprises

As a scalable family of DPI-based multi-service platforms, Allot Service Gateway Appliances can accommodate both small and large-sized enterprise networks.

- **Capacity:** The 9000 series can support up to 9 million active users (concurrently attached and active) and 144 million concurrent IP flows
- **Maximum Connectivity:** up to 32 x 1/10 Gigabit Ethernet or up to 8 x 100 Gigabit Ethernet
- **Throughput:** up to 300 Gbps in a single platform
- **Port flexibility:** Allot SGs support wide range of ports/interfaces types from 1G Base-T copper or fiber, 10G Base SR/LR, 25G Base SR/LR up to 100G Base SR4/LR4
- **Central Management** and configuration by Allot Gateway Manager
- Allot Service Gateways are also available in NFV-compliant virtual editions. For more information, please consult with your Allot representative, or visit www.allot.com

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 utilizes dedicated interfaces with very low synchronization traffic overhead.

Allot Service Gateway 9100E, 9100R and 9700R

	Allot SG-9100E	Allot SG-9100R	Allot SG-9700R
Capacity			
Throughput per Platform *	50Gbps*	150Gbps*	300 Gbps*
Number of Connections / Flows	12,000,000/24,000,000	36,000,000/72,000,000	72,000,000/144,000,000
Number of registered Users / Subscribers	1,000,000	2,500,000	9,000,000
Number of Static Lines / Pipes / Virtual Channels	512/5000/15000	512/5000/15000	512/5000/15000
Number of Active Lines / Pipes / Virtual Channels	10K/1000K/2000K	10K/1800K/4500K	10K/6,600K/13,600K
Standards			
Ethernet Interfaces	16 ports of 1/10/25GE 1GBASE-T, 1GBASE - SX/LX, 10GBASE - SR/LR, 25GBASE -SR/LR**	22 ports of 1/10/25GE 1GBASE-T, 1GBASE - SX/LX, 10GBASE - SR/LR, 25GBASE -SR/LR**	8 ports of 100GE (QSFP28): 100GBASE-SR4/LR4 Or 32 ports of 10GE (QSFP+ with breakout cable): 10GBASE - SR/LR Or 4 ports of 100GE (QSFP28) and 16 10GE (QSFP+ with breakout cable)
Management	2 x 1/10 Gigabit Ethernet	2 x 1/10 Gigabit Ethernet	4 x 1/10/25 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	Including L2TP v1/2, MPLS, PPPoE, GRE, GTP, 6rd, Teredo, SNAP, DS-Lite/MAP-E and others	Including L2TP v1/2, MPLS, PPPoE, GRE, GTP, 6rd, Teredo, SNAP, DS-Lite/MAP-E and others
IP Version	IPv4, IPv6	IPv4, IPv6	IPv4, IPv6
Access Technology Support	2G, 3G, 4G/LTE, 5G, CDMA, DOCSIS, WiMAX, DSL, FTTx, PON	2G, 3G, 4G/LTE, 5G, CDMA, DOCSIS, WiMAX, DSL, FTTx, PON	2G, 3G, 4G/LTE, 5G, CDMA, DOCSIS, WiMAX, DSL, FTTx, PON

* Throughput values in this document were measured in the Allot lab under specific use cases and settings.
Actual throughput and performance metrics depend on enabled features, policy configuration, traffic mix, and other deployment characteristics.

** 25Gbps support will be available during 2027

Allot Service Gateway 9100E, 9100R and 9700R

	Allot SG-9100E	Allot SG-9100R	Allot SG-9700R
Product Options			
Network Analytics	Real-time/Long-Term Monitoring and Reporting	Real-time/Long-Term Monitoring and Reporting	Real-time/Long-Term Monitoring and Reporting
High Availability	Active redundancy (1:1, 1+1), Bypass	Active redundancy (1:1, 1+1), Bypass	Active redundancy (1:1, 1+1), Bypass
Asymmetric Traffic Control	Yes	Yes	Yes
Physical Characteristics			
Form Factor	2U 19" rack mount	2U 19" rack mount	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	8.68 x 48.20 x 80.23 cm (3.42 x 18.98 x 31.59 in), with Bezel	8.73 x 44.54 x 67.94 cm (3.44 x 17.54 x 26.75 in), without Bezel
Weight	25.5 kg (56.2 lbs)	25.5 kg (56.2 lbs)	21 kg (46.29 lbs)
Power	AAC - 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	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	AC - 1000W Flex slot 100-240V, Titanium = hot plug redundant power supply, DC - 1000W Flex slot -48V DC = Dual hot plug redundant power supply
Operating Temperature/Environment	10°C to 35°C (50°F to 95°F) Relative humidity (%RH) 8% to 90%	10°C to 35°C (50°F to 95°F) Relative humidity (%RH) 8% to 90%	10°C to 35°C (50°F to 95°F) Relative humidity (%RH) 8% to 90%
Availability			
System Redundancy	Dual hot plug redundant power supply	Dual hot plug redundant power supply	Dual hot plug redundant power supply
Hardware Bypass	Independent, passive bypass unit	Independent, passive bypass unit	Independent, passive bypass unit
Bypass Configuration (up to)	Up to two units of the following bypass devices depending on the interfaces used and available: 8 RJ45-RJ45 1G copper ports (4 links), or 8 LC-LC MM/SM fiber-optic ports (4 links), or 16 LC-LC MM/SM fiber-optic ports (8 links), or 24 LC-6 MTP MM/SM fiber-optic ports (12 links)	Up to two units of the following bypass devices depending on the interfaces used and available: 8 RJ45-RJ45 1G copper ports (4 links), or 8 LC-LC MM/SM fiber-optic ports (4 links), or 16 LC-LC MM/SM fiber-optic ports (8 links), or 24 LC-6 MTP MM/SM fiber-optic ports (12 links)	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) Two units, 6 MTP-MTP MM fiber-optic ports (3 links of SR4 100G)
Standards Compliance			
HD-8 Multi-Port Bypass Unit	External 1U 19" rack mount, 2.44kg (5.38lb)	External 1U 19" rack mount, 2.44kg (5.38lb)	External 1U 19" rack mount, 2.44kg (5.38lb)
HD-16 Multi-Port Bypass Unit	External 1U 19" rack mount, 2.64kg (5.82lb)	External 1U 19" rack mount, 2.64kg (5.82lb)	External 1U 19" rack mount, 2.64kg (5.82lb)
HD-24 Multi-Port Bypass	Unit External 1U 19" rack mount, 2.86kg (6.3lb)	Unit External 1U 19" rack mount, 2.86kg (6.3lb)	Unit External 1U 19" rack mount, 2.86kg (6.3lb)
Safety	UL60950 CE CB	UL60950 CE CB	UL60950 CE CB
EMC (Electromagnetic Compliance)	FCC CE VCCI ICES	FCC CE VCCI ICES	FCC CE VCCI ICES
Environmental	RoHS, China ROHS WEEE REACH	RoHS, China ROHS WEEE REACH	RoHS, China ROHS WEEE REACH