

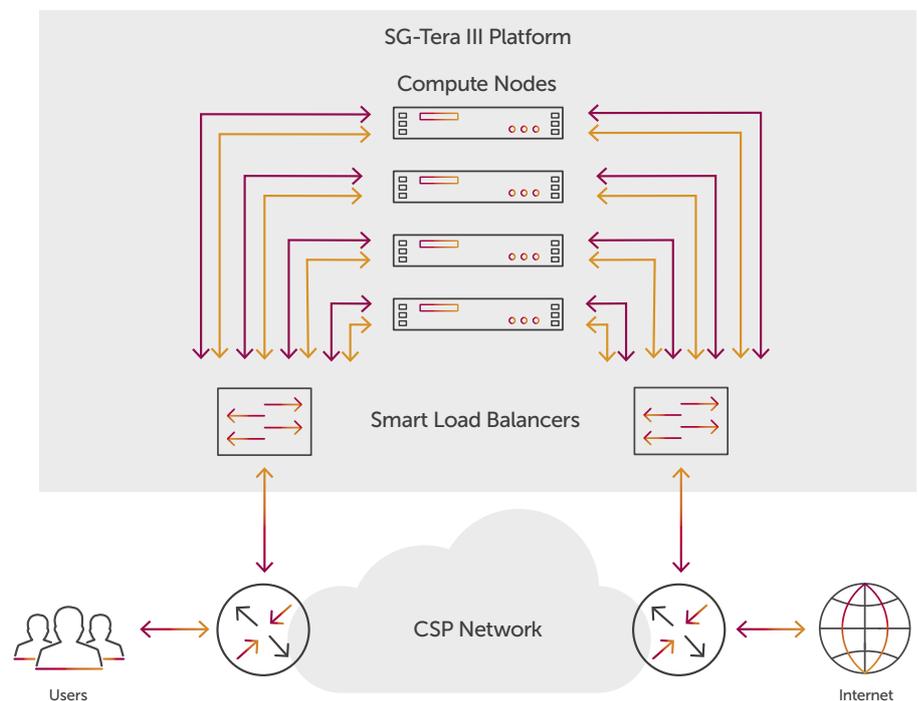
# SG-Tera III

## Empowering Rapid Deployment for Service Innovation at Carrier Grade Scale

As a fixed, mobile, or converged operator, you need to deploy new services rapidly and at the highest level of quality. SG-Tera III enables this for all aspects of current and future services and applications, delivering detailed network visibility and traffic management that enable cyber and user path protection, QoE assurance, policy control and charging, 5G Gi-LAN services and more. Allot's next-generation SG-Tera III brings to you the latest service gateway functionality with unprecedented capacity of more than 2.8 Tbps and support of up to 24 400GbE interfaces per single platform.

### Standard COTS-based architecture

Using standard network Smart Load Balancers and COTS-based architecture reduces your cost of deployment and provides best-in-class price/performance characteristics, compared to other bare metal or virtual solutions.



### Easy upgrade path

SG-Tera III uses Compute Nodes based on the same hardware as our leading SG-9900R appliance. As a result, it is very easy to upgrade/convert your current Allot SG-9900R deployment to SG-Tera III. All you need is to add two Smart Load Balancers (SLBs) and the necessary amount of Compute Nodes, and you will have a new platform that will satisfy your future capacity and processing power requirements.

## 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 supports user-defined signatures. Frequent and automated updates to the signature library keep Allot Service Gateways up to date with the latest application 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 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 synergistic inspection methods provide highly granular and accurate recognition of encrypted traffic, even at maximum speeds and peak loads.

## Intelligent PCEF/TDF

Compliance with 3GPP standards and interoperability with most PCRF systems enable Allot SG-Tera III to provide intelligent Traffic Detection Function (TDF) and Policy and Charging Enforcement Function (PCEF) in mobile data networks. As a result, network operators can leverage Allot's granular traffic classification and metering to enrich the policy decisions of PCRF elements, and to enhance the charging capabilities of online and offline charging systems (OCS, OFCS).

## User Path Protection

Allot's Smart NetProtect instantly detect and block both inbound and outbound DDoS attacks. Machine learning and artificial intelligence learn normal traffic behavior, enabling rapid, accurate detection and mitigation of abnormal attack traffic.

## 5G Gi-LAN Services

When building new 5G networks, many service providers seek to deploy non-core, value-added services across the Gi-LAN network segment. In this scenario, the SG-Tera III can be located on the N6 interface (between the UPF and internet router) to simplify VAS chaining. The Gi-LAN network segment can thus more easily provide enhanced 5G security and value-added service offerings to differentiate and monetize services. For service providers, it is critical to have efficient Gi-LAN architecture to deliver a high-quality service experience. Having a single point of VAS control and management supports high flexibility and redundancy between different value-added services. A key advantage of the SG-Tera III is the ability to use 5G core control information in the non-5G core segment of the network.

| Platform Configuration                         |  |
|--|--|
| Compute Nodes                                  | 8 (7 active + 1 standby)   |
| Network SLBs                                   | 2  |
| Capacity                                       |  |
| Throughput per Platform*                       | 2.8 Tbps (8 active CN)   |
| Number of flows                                | 1,200,000,000  |
| CER (Connection Establish Rate)                | 7,500,000 Cps  |
| Number of Active Subscribers                   | 60M  |
| Number of Lines / Pipes / Virtual Channels     | 512 / 42,000,000 / 84,000,000  |
| Interface Types                                |  |
| Ethernet Interfaces                            | 24x400GE QSFP DD 400G FR4/DR4***/LR4, 96x100GE QSFP28 100GBASE-DR1/FR1/LR1 (PAM4), 48x100GE QSFP28-DD LR4/SR4 (NRZ) or 96x10/25Gbps QSFP+ SR/LR                            |
| Management                                     | 2x25Gbps (Supports also 10/100Gbps based on customer demand)   |
| Availability                                   |  |
| Hardware Bypass                                | Up to 8 independent, passive bypass units, supporting either. 16 SM fiber-optic ports (8 links), or 24 SM fiber-optic ports (12 links) per unit or 6 MM fiber-optics ports |
| High Availability                              | N+M redundancy of Compute Nodes (N+1 if bypass used)   |
| Management                                     | Active Standby HA on management ports  |
| SLBs   | 1+1 SLB redundancy   |
| Dimensions                                     |  |
| Compute Node (8 units) Standard 19" rack mount | 2U (16U per 8 CN) LxWxH 76.31x43.46x8.73cm, without Bezel, 14.9Kg  |
| SLB (2 units) Standard 19" rack mount          | 1U (2U per 2 units) LxWxH 43.8 x 4.3 x 53.59 cm ,11.1Kg  |
| HD-16 port Single Mode Bypass Unit             | External 1U 19" rack mount LxWxH 43.95x145x43.6cm, 3kg   |
| HD-24 port Single Mode Bypass Unit             | External 1U 19" rack mount LxWxH 43.95x145x43.6cm, 3kg   |
| Power Supply                                   |  |
| Compute Node DC                                | DC - 1600W Flex slot -48VDC Hot plug redundant power supply  |
| DC redundancy                                  | 1+1  |
| Compute Node AC                                | AC - 1800W-2200W Flex slot Titanium hot plug redundant power supply  |
| AC redundancy                                  | 1+1  |
| SLB Power supply summary                       | Redundant** (1+1) hot-pluggable 970 W AC/DC power supplies 110-240V single phase AC power, -36 to -72V DC power  |
| Power Consumption                              |  |
| Compute Node                                   | 1600 W   |
| SLB  | 970 W  |
| Max Power Consumption per cluster of 8 CN      | 14740 W  |
| Standard Compliance                            |  |
| Safety   | UL60950 CE CB  |
| EMC  | FCC, CE, VCCI, ICES  |
| Environmental                                  | RoHS, China RoHS, WEEE, REACH  |

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

\*\* AC power supply redundancy supported only for 200-240V, 100V supported only in non-redundant configuration

\*\*\* DR4 support is part of 2026 product roadmap