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# 10 Licensing

- Stingray Service Gateway (SSG) licensing depends on the bandwidth and its features.
- The license is time-unlimited.
- [Technical support](#) is not included in the license and is paid separately.

## Bandwidth

Licenses grading of the bandwidth: **SSG-6/10/20/40/60/80/100/120/200**. [Pay attention to the hardware requirements!](#)

Depending on [the installation scheme](#), the following restrictions are assumed:

### 1. When installing "in line" scheme

- SSG-6 corresponds to 5Gb/s of incoming and to 1Gb/s of outgoing traffic
- SSG-10 corresponds to 8Gb/s of incoming and to 2Gb/s of outgoing traffic
- SSG-20 corresponds to 15Gb/s of incoming and to 5Gb/s of outgoing traffic
- SSG-40 corresponds to 30Gb/s of incoming and to 10Gb/s of outgoing traffic
- SSG-60 corresponds to 45Gb/s of incoming and to 15Gb/s of outgoing traffic
- SSG-80 corresponds to 60Gb/s of incoming and to 20Gb/s of outgoing traffic
- SSG-100 corresponds to 75Gb/s of incoming and to 25Gb/s of outgoing traffic
- SSG-120 corresponds to 90Gb/s of incoming and to 30Gb/s of outgoing traffic



Licensing includes ISP traffic asymmetry. Usually, the incoming traffic is three times more than the outgoing one.

**For example, Incoming - 6G, Outgoing - 2G. License - SSG-10.**

### 2. When installing using the "mirror" scheme

- SSG-6 corresponds to 6Gb/s of total incoming traffic
- SSG-10 corresponds to 10Gb/s of total incoming traffic
- SSG-20 corresponds to 20Gb/s of total incoming traffic
- SSG-40 corresponds to 40Gb/s of total incoming traffic
- SSG-60 corresponds to 60Gb/s of total incoming traffic
- SSG-80 corresponds to 80Gb/s of total incoming traffic
- SSG-100 corresponds to 100Gb/s of total incoming traffic
- SSG-120 corresponds to 120Gb/s of total incoming traffic

## License Exceeding



If the license bandwidth parameters are exceeded, the DPI will process the traffic until its capabilities are exhausted. After that, traffic will be skipped without processing. You can limit the bandwidth yourself using channel policing. This is only relevant if the total bandwidth over the ports exceeds the license bandwidth specification.

## Reserve SSG license

For the purpose of increasing the fault tolerance of the solution, we recommend backing up the main SSG server. Redundancy schemes and descriptions for BRAS L3 and [BRAS L2](#).

Terms of use of the reserve license:

1. Use only for backup purposes of the main server
2. Constant traffic transmission no more than 5% of the license volume, in order to monitor the health of the backup server
3. Processing of all traffic of the main server only in case of an accident or maintenance of the main server

## Features

[Licenses grading of the features:](#) **Base/BNG/Complete**

Options	BASE	BNG	COMPLETE
Bypass	✔	✔	✔
Filtering by the blocklisted internet sites	✔	✔	✔
Statistics gathering and analysis on protocols and directions	✔	✔	✔
Traffic prioritization depending on protocols and directions	✔	✔	✔
Common channel policing	✔	✔	✔
Subscriber notification and marketing campaigns	✔	✔	✔
Subscribers channel policing for IPv4 and IPV6	✖	✔	✔
Allow Lists and Captive Portal	✖	✔	✔
BNG L3 (iPoE), Dual Stack IPv4/IPV6, Radius with CoA	✖	✔	✔
BNG L2 (PPPoE, DHCP), Dual Stack IPv4/IPV6	✖	✔	✔
Carrier-Grade NAT	✖	✔	✔
Lawful interception (U)	✖	⊖	✔
Ads blocking and replacing	✖	⊖	✔
Mini-Firewall for blocking on certain ports	✖	⊖	✔
Protection against DOS and DDOS attacks	✖	⊖	✔
One-year Support and Subscription Services	✔	✔	✔
Adding banners to HTTP resorses		Subscription	
Categorization of web resorses		Subscription	
<b>Reserve License</b>			
Stand by License		25% from main License	
✔ Yes      ⊖ Optional      ✖ No			