

 IPLOOK

xGW(SGW/PGW) PRODUCT INFORMATION

IPLOOK Technologies

www.iplook.com



Contents

1 Description.....	1
2 Feature List.....	3
3 Product Strategy.....	5
4 Technical Support.....	7

1 Description

The SGW(Serving Gateway) handles the user data traffic, but isn't responsible for the signaling data used. It transports IP data from UE's to the LTE Core Network. The SGW also routes incoming and outgoing IP packets for better system collaboration and serves as an anchor for the UE when it moves from one eNodeB to another.

PGW (PDN Gateway) is the network node that connects the EPC to external IP networks. What the PGW does is that it routes packets to and from external IP networks. Beyond that, it also allocates an IP address to all UEs and enforces different policies regarding IP user traffic such as packet filtering.

2 Feature List

2.1 Serving Gateway (SGW) Features

Feature	Details
Session Management	-
Mobility Management	-
Data Forward and Rout Path Selection	-
QoS Control	-
Charging Function	-
Overload Control	-
S-GW Pool Function	-
Interfaces comply to 3GPP R13 Standard	S1-U
	S11
	S5/S8
	S4/Gn
	Ga

2.2 PDN Gateway (PGW) Features

Feature	Details
Session Management	-
Mobility Management	-
Data Forward and Route Path Selection	-
QoS Control	-
Charging Function	-
IP address Allocation	-
PCEF Function	-
Overload Control	-
PCRF Function Integrated with PGW	-
Interfaces comply to 3GPP R13 standard	S5/8
	S11
	Gx
	Gy
	Ga
	Gn
	SGi
Rx	

3 Product Strategy

IPLOOK PGW/SGW product can be deployed based on customer requirement with a very flexible strategy.

3.1 Deployment Strategy

There are two deployment strategy provided by IPLOOK currently.

3.1.1 Standard Carrier Grade PGW/SGW

Carrier Grade PGW/SGW adopts the ATCA chassis as the hardware platform. The PGW/SGW can be stand-alone or integrated in one chassis according to the capacity requirement.



IKEPC300-GW

- ✓ Hardware Description:

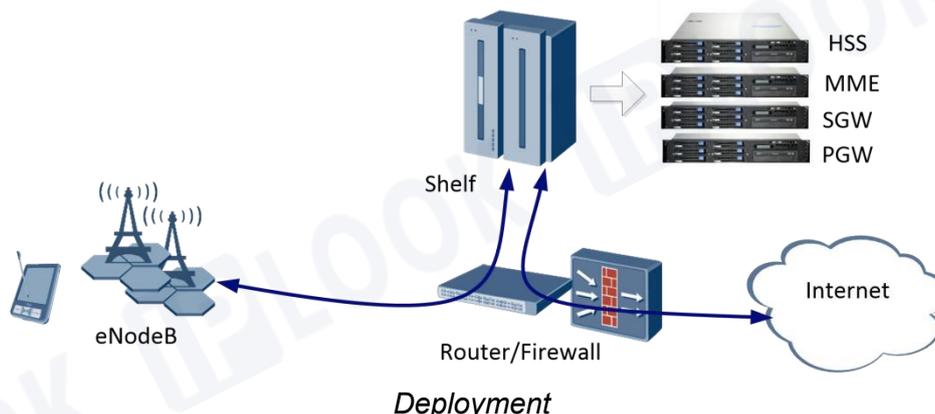
- Standard ATCA 12U 14 Slot chassis.
- 2 System Switch Blades(SSB), 2 System Management Blades(SMB), X Service Process Blades(SPB).
- For SPB, 2*10 cores 2.3GHz, 16G Memory
- ✓ Performance:
 - Up to 320,000 subscribers supported.
 - Up to 36Gbps throughput supported.
- ✓ Recommended Hardware Configuration
 - 2 SSB, 2 SMB, 4(SPB for Session Process), 2(SPB for IO Process)

3.1.2 Virtualized xGW

vGW adopts x86 COTS server as the platform. The PGW/SGW function can be NFV element and deployed in the data center. Or, the PGW/SGW net element can be directly deployed on the X86 server to reduce the CAPEX.



IKEPC150-xGW



- ✓ Hardware Description:
 - X86 Servers
 - 2*10 cores 2.3GHz, 32G Memory

- ✓ Performance:
 - Up to 50,000 subscribers per server supported.
 - Up to 4Gbps through per server supported.

3.1.3 License Strategy

IPLOOK SGW/PGW license strategy is mainly based on the Capacity and Throughput Rate for data plant.

There also some features need license.

- Redundancy Function
- Overload Control
- 3GPP Call Trace
- Throughput rate accelerate
- Local PCRF Function

■

4 Technical Support

4.1 Training

- Provide free training and technology consulting for customer after system have been completed, to ensure related person can use this system correctly. [Main courses of training are as follow:
 - a) Business process understanding of industry and enterprise, and information training.
 - b) Technical training of system hardware device operation specification
 - c) System software program installing, operation, and system software upgrading training
 - d) System simple maintenance training
 - e) System fault location and solving method of faults training.

4.2 Guarantee and service commitment

- Quality assurance:

The products that we have produced and sold are designed and built under industry standard. All products have eligibility card, warranty card. They are all new, original and accepted products.

- The warranty period: ONE YEAR.

During the warranty period, IPLOOK provides free maintenance for software or hardware provided by IPLOOK, in case the products suffer from a failure. (The failure are caused by non-human factors). Software can be freely upgraded and the hardware can be return to the factory for maintenance service. The resulting costs are free.

After the warranty period, IPLOOK provides free technical support for system upgrading and equipment comprehensive maintenance. The other services are as same as warranty period except that the transportation expenses fee will be charged.

Upgrade: software upgrading is free, and hardware upgrading will take a discount.

- Operation and maintenance scheme

Resident maintenance: IPLOOK staffs will be arranged to real-time monitoring in 24 hours. They are in charge of resident maintenance, upgrading software and hardware, and take charge of connecting and debugging other products.

Remote maintenance: IPLOOK will provide remote monitoring, remote maintenance and debugging for communication products.

- Fault handling and response time

During the warranty, if the product doesn't work normally, IPLOOK will take a response within 1 hour after receiving the customer's repair record and arrive to site within 12 hours. IPLOOK ensure the repair will be completed within 48 hours.

If special condition occurs and it cannot be repaired, IPLOOK will provide alternative equipment in the following 2 working day until the user equipment are back to service.

During the warranty, if the equipment is still in abnormal state after repairment, we will provide the replacement of new equipment with no charge.