Ruijie RG-NBR6000 Series

Enterprise-Level

Routers

Datasheet

V0.9

1 Product Overview

The RG-NBR6000 series are multi-service integrated routers designed for business offices, hotels and restaurants. Featuring intelligent packet forwarding, precise flow control, online behavior management, VPN tunnel communication and smart route planning, the routers also allow you to perform remote operation, maintenance management in a unified manner through Ruijie Cloud. In addition, the RG-NBR6000 series routers can be used as access controllers and support cache acceleration and log storage, which are the ideal routers for the enterprises.

2 Product Appearance

RG-NBR6120-E

Figure 1-1 Front View of a RG-NBR6120-E Enterprise-Level Router

RG-NBR6205-E

Figure 1-2 Front View of a RG-NBR6205-E Enterprise-Level Router

RG-NBR6210-E

Figure 1-3 Front View of a RG-NBR6210-E Enterprise-Level Router

RG-NBR6215-E

Figure 1-4 Front View of a RG-NBR6215-E Enterprise-Level Router

3 Product Features

Enterprise-Level Integrated Performance

The router integrates functions such as flow control, behavior management, load balancing, cache acceleration and implements the functions of multiple devices such as routers, access controllers and VPN devices through one device.

Convenient Management: The router can locate the fault rapidly to significantly simplify the operation and maintenance procedures and the management.

Low Cost: The router provides a set of comprehensive solutions for problems to lower the cost. .

Easy Deployment: The router can be deployed and get online in three minutes, simplifying the deployment procedures. In addition, free cloud management platform allows you to perform remote operation and maintenance.

Comprehensive Identification and Precise Flow Control

The router adopts such identification methods as DPI and DFI to identify the mainstream applications in the market and update the application library every week, ensuring long-term validity of the identification. The router can implement comprehensive and refined management of the network bandwidth. Through the precise flow control, the bandwidth can be fully utilized and properly allocated.

Visualized VPN (L2TP/PPTP/IPSec VPN)

The router supports visualized management of VPN tunnels and the traffic in the tunnels, so that users can view the VPN connection status and service traffic. In addition, this feature can also control the traffic in the VPN tunnel to ensure the smooth use of the video conferencing software in the VPN. The RG-NBR6000 series routers support up to 1000 IPSec VPNs online at the same time.

Smart Route Planning for Efficient Bandwidth Usage

The NBR-6000 series routers provide a complete set of smart route planning system to address the

routing difficulties for multiple breakouts. The router can automatically analyze the real-time usage of multiple routes and select the optimal route to avoid low link usage and low bandwidth usage.

The offload feature can monitor the status of the TCP connection in multi-ISPs scenarios. If a TCP connection fails to respond during the offload process, the router will automatically transfer the application traffic to a smooth route to ensure that networks of multiple ISPs do not freeze. Meanwhile, high-priority application traffic is automatically allocated to high-quality routes for better network performance.

Web GUI Management and Free Cloud Management

The RG-NBR6000 series routers support Web GUI management and Ruijie DDNS. You can log in to the management system through the internal or external network for device management. Meanwhile, the free cloud management service provided by Ruijie allows you to monitor the device status in a unified manner, which simplifies the operation and maintenance procedures.

Powerful local security protection features to ensure network security and stable operation

The product can provide protection capabilities such as anti-DDos attack, anti-snooping attack, and anti-ARP, as well as security features related to data forwarding such as access control and intranet service awareness, so as to avoid network paralysis and data transmission caused by internal and external network attacks to the greatest extent.

The third-generation screen sharing solution, one-to-one accurate sharing

For hotel customers, RG-NBR6000 series products can meet the needs of guests to use terminals (mobile phones, pads, etc.) to share screen to TV. The latest screen sharing solution, without adding additional hardware equipment, helps hotel owners save investment costs. In addition, it can also prevent guests from being mistakenly shared on TVs in other rooms, improving the guest experience.

4 Technical Specifications

Hardware Specifications

Technical Specifications of an RG-NBR6000 Router

Specifications	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
WAN Port	1 x 10/100/1000 Base-T port	1 x 10/100/1000 Base-T port	1 x 10/100/1000 Base-T port	1 x 10/100/1000 Base-T port
LAN Port	1 x 10/100/1000 Base-T port	1 x 10/100/1000 Base-T port	1 x 10/100/1000 Base-T port	1 x 10/100/1000 Base-T port
LAN/WAN Switchable Port	3 x 10/100/1000 Base-T port	6 x 10/100/1000 Base-T ports 2 x 1GBase-X SFP ports	6 x 10/100/1000 Base-T ports 2 x 1GBase-X SFP ports	6 x 10/100/1000 Base-T ports 1 x 1GBase-X SFP port 1 x 10GBase-X SFP+ port
Throughput	600 Mbps	1.5 Gbps	2.5 Gbps	2.5 Gbps
Client (Recommended)	200	500	1000	1500

System Specifications

Parameters	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
CPU	2 Cores, 880 MHz	2 Cores, 1.2 GHz	3 Cores, 1.2 GHz	4 Cores, 1.2 GHz
SDRAM/RAM	512 MB	2 GB	2 GB	2 GB
Flash Memory	4 GB	8 MB	8 MB	8 MB
	Not Support	1 TB (Not delivered with the	1 TB (Not delivered with the	1 TB (Not delivered with

Parameters	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Hard Disk Drive		router, can be added)	router, can be added)	the router, can be added)

Physical Specifications

Parameters	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
LED	1 x System Status LED 1 x Power Status LED	1 x System Status LED 1 x Power Status LED 1 x SATA LED	1 x System Status LED 1 x Power Status LED 1 x SATA LED	1 x System Status LED 1 x Power Status LED 1 x SATA LED
Button	1 x Power button	1 x Power button	1 x Power button	1 x Power button
Dimensions (W x D x H)	440 mm x 43.6 mm x 200 mm (17.32 in. x 1.72 in. x 7.87 in., without rubber pads)	440 mm x 43.6 mm x 200 mm (17.32 in. x 1.72 in. x 7.87 in., without rubber pads)	440 mm x 43.6 mm x 200 mm (17.32 in. x 1.72 in. x 7.87in., without rubber pads)	440 mm x 43.6 mm x 200 mm (17.32 in. x 1.72 in. x 7.87 in., without rubber pads)
Mounting Method	Rack-mounted	Rack-mounted	Rack-mounted	Rack-mounted
Rack Size	1U 19-inch Rack-mounted	1U 19-inch Rack-mounted	1U 19-inch Rack-mounted	1U 19-inch Rack-mounted
Fan	N/A	2	2	2

Environment

Environment	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Operating Temperature	–5ºC to 45ºC (23°F to 113°F)	0ºC to 45ºC (32°F to 113°F)	0ºC to 45ºC (32°F to 113°F)	0ºC to 45ºC (32°F to 113°F)
Operating Humidity	10% to 90% RH (non-condensing)	10% to 90% RH (non-condensing)	10% to 90% RH (non-condensing)	10% to 90% RH (non-condensing)

Performance

Performance	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Max Managed Access Points	16 Access points or 32 wall-mounted access points	32 Access points or 64 wall-mounted access points	64 Access points or 128 wall-mounted access points	64 Access points or 128 wall-mounted access points
PPPoE Server Accounts	64	64	64	64

Package Contents

Package Contents	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Router	1	1	1	1
Power Cord	1	1	1	1
Power Cord Retention Clip	1	1	1	1
Rubber Pads	4	4	4	4
Mounting Brackets	2	2	2	2
M4 x 8 mm Screws	6	6	6	6
DB-9 Console Cable	1	1	1	1
Ethernet Cable	1	1	1	1
User Manual	1	1	1	1
Warranty Card	1	1	1	1

Software Specifications

Basic Features

Basic Features	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Internet Access Mode	PPPoE Client DHCP Client Static IP	PPPoE Client DHCP Client Static IP	PPPoE Client DHCP Client Static IP	PPPoE Client DHCP Client Static IP
Access Mode Auto-Identification	Support	Support	Support	Support
WAN Address Collision Avoidance	Support	Support	Support	Support
VLAN	Support	Support	Support	Support
IPv6	Not Support	Support	Support	Support
SNMP	Support	Support	Support	Support

Network Management

Network Management	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Port Isolation	Support	Support	Support	Support
Port Mirroring	Support	Support	Support	Support
LAN Port Link Aggregation	Not Support	Support	Support	Support
AC Mode	Support	Support	Support	Support
Behavior Management	App Block (Time/IP-based Policy) Website Filtering Blacklist/Whitelist			
Application Identification	Support	Support	Support	Support
Application Priority	Support	Support	Support	Support
Flow Control	User Flow Control Policies IP-based Automatic Bandwidth Assignment VPN Flow Control			

Network Management	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
System Log	Support	Support	Support	Support
Log Storage	Support	Support	Support	Support
Fault Diagnosis	Support	Support	Support	Support
Authentication	Portal Authentication Password Authentication Voucher Authentication SMS Authentication			

VPN

VPN	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
L2TP VPN	Support	Support	Support	Support
PPTP VPN	Support	Support	Support	Support
IPsec VPN	Support	Support	Support	Support
L2TP/PPTP Tunnels	16	400	600	1000
L2TP/IPsec VPN Performance	8 Mbps	400 Mbps	600 Mbps	1000 Mbps

Routing

Routing	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Static Routing	Support	Support	Support	Support
RIP/RIPng	Support	Support	Support	Support
OSPFv2	Support	Support	Support	Support
OSPFv3	Not Support	Support	Support	Support

Routing	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Equal-Cost Multi-Path Routing	Support	Support	Support	Support
Policy-Based Routing	Support	Support	Support	Support
Active/Standby Switchover of Ports	Support	Support	Support	Support
WAN Load Balancing	Support	Support	Support	Support

Network

Network	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
PPPoE Client	Support	Support	Support	Support
PPPoE Server	Support	Support	Support	Support
DHCP Server	Support	Support	Support	Support
DHCP Snooping	Support	Support	Support	Support
DNS Client	Support	Support	Support	Support
DNS Server	Support	Support	Support	Support
DNS Proxy	Support	Support	Support	Support
FTP Client	Support	Support	Support	Support
FTP Server	Support	Support	Support	Support
TFTP Client	Support	Support	Support	Support
NTP Client	Not Support	Support	Support	Support

Network	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
DDNS	Cloud DNS	Cloud DNS	Cloud DNS	Cloud DNS
NAT	Support	Support	Support	Support
SNMP	Support	Support	Support	Support
Ruijie Cloud	Support	Support	Support	Support

ACL

ACL	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
ACL	Support	Support	Support	Support
Time-based Extended ACL	Support	Support	Support	Support

Security

Security	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
SYN Flood Attack Guard	Not Support	Support	Support	Support
UDP Flood Attack Guard	Not Support	Support	Support	Support
ICMP Flood Attack Guard	Not Support	Support	Support	Support
ICMP Redirection Attack Guard	Not Support	Support	Support	Support
ICMP Unreachable Packet Attack Guard	Not Support	Support	Support	Support

| Security	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Fraggle Attack Guard	Not Support	Support	Support	Support
Overlength ICMP Packet Attack Prevention	Not Support	Support	Support	Support
Winnuke Attack Guard	Not Support	Support	Support	Support
IP-based Security Domain Division	Not Support	Support	Support	Support
Security Domain Division based on Physical Port (Sub Interface and Aggregation Port) and Dialup Port	Not Support	Support	Support	Support

Service and Support

| Service and Support	RG-NBR6120-E	RG-NBR6205-E	RG-NBR6210-E	RG-NBR6215-E
Cloud Management	Support	Support	Support	Support
App Management	Support	Support	Support	Support
App Upgrade	Support	Support	Support	Support
App Restart	Support	Support	Support	Support

5 Application Scenarios

Featuring intelligent packet forwarding, precise flow control, online behavior management, VPN tunnel communication and smart route planning, the router is applicable to branch offices, hotels, restaurants, schools and chains. You can establish breakout connections with only one router.

Scenario 1: Branch Offices
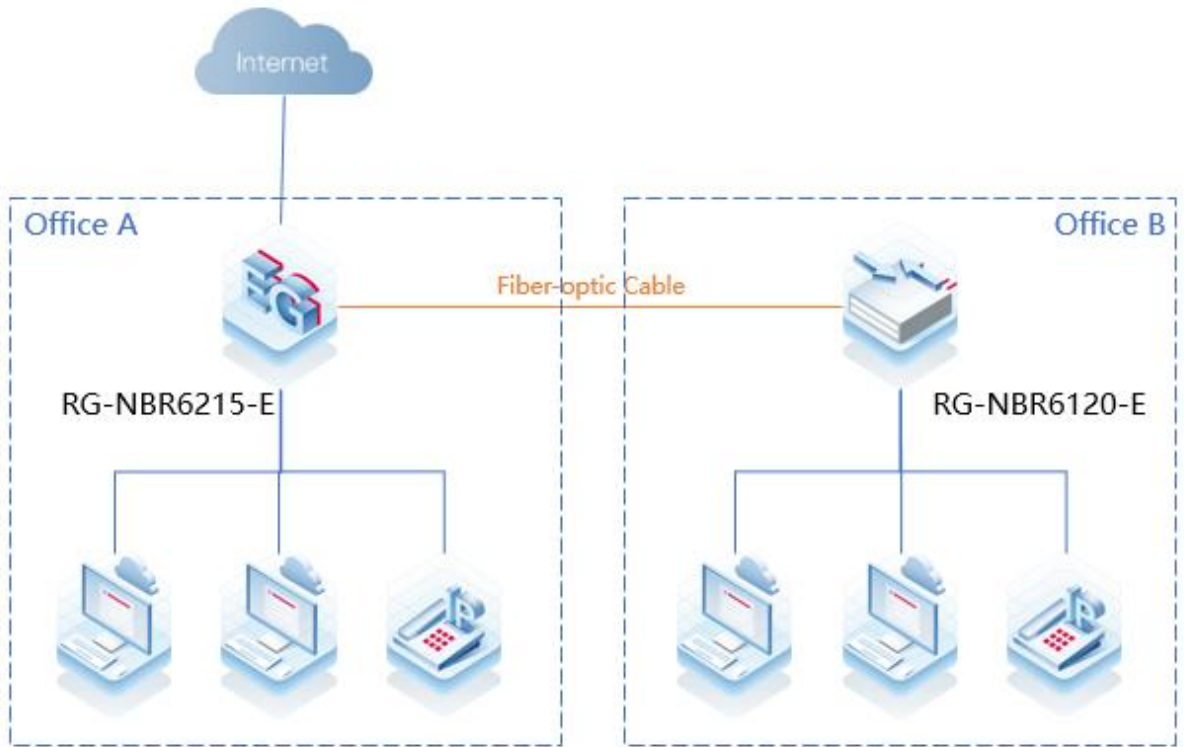
Scenario 2: Hotels
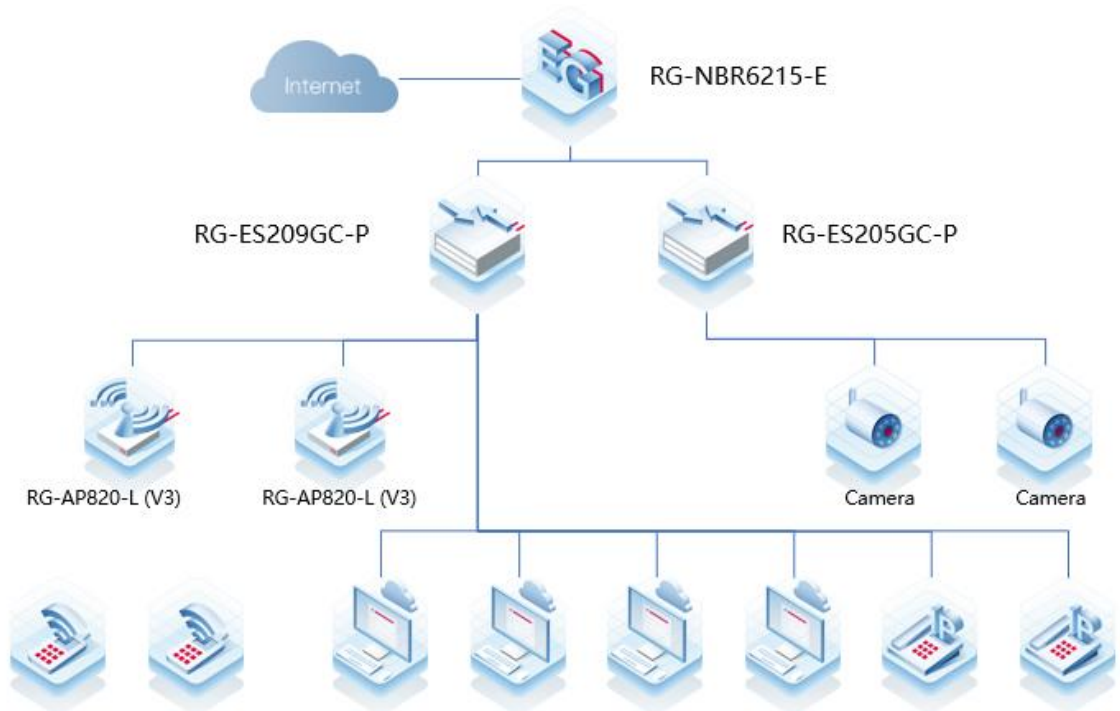
6 Ordering Information

Model	Description
RG-NBR6120-E	5 Gigabit electric ports, 1 USB port and 1 Console port; 200 recommended concurrent clients, 600 Mbps maximum throughput ; support Ruijie Cloud app and Ruijie Cloud platform management.
RG-NBR6205-E	8 Gigabit electric ports, 2 Gigabit optical ports, 2 USB ports and 1 Console port; 500 recommended concurrent clients, 1.5 Gbps maximum throughput ; support Ruijie Cloud app and Ruijie Cloud platform management.
RG-NBR6210-E	8 Gigabit electric ports, 2 Gigabit optical ports, 2 USB ports and 1 Console port; 1000 recommended concurrent clients, 2.5 Gbps maximum throughput;　support Ruijie Cloud app and Ruijie Cloud platform management.
RG-NBR6215-E	8 Gigabit electric ports, 1 Gigabit optical port, 1 10Gigabit optical port, 2 USB ports and 1 Console port; 1500 recommended concurrent clients, 2.5 Gbps maximum throughput;　support Ruijie Cloud app and Ruijie Cloud platform management.