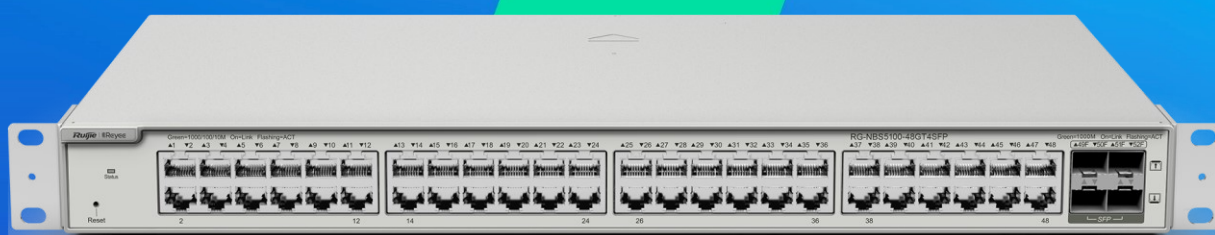


# RG-NBS5100-48GT4SFP

## 52-Port Gigabit Layer 3 Non-PoE Switch



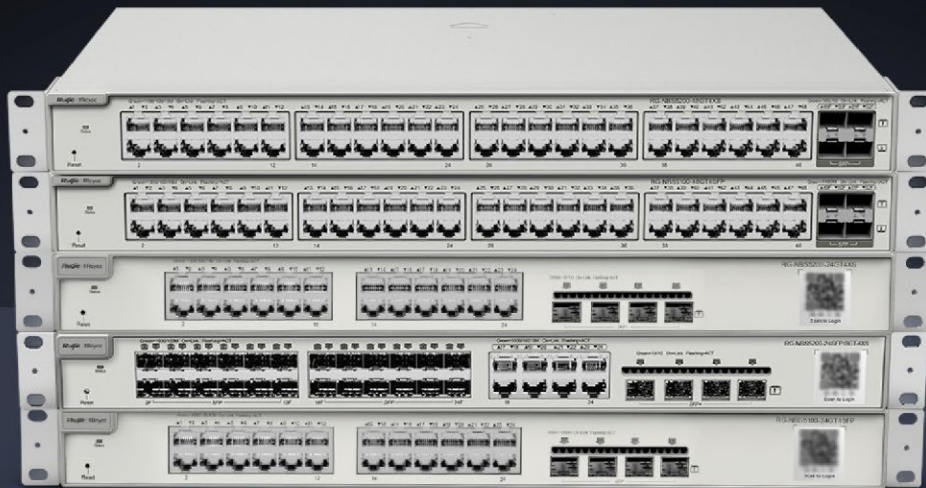
### Highlights

- 52-Port gigabit Layer 3 managed non-PoE switch, 4 SFP uplink
- Enterprise-class Quality Ensures High Performance
- 6KV surge protection reduces the possibility of port damage
- Multiple Security Policies Protect Your Network
- Lifetime management on Ruijie Cloud at anytime anywhere

## Highlight Features

### RG-NBS5000 Series Switch

High performance Layer 3 switch for core/aggregation



Dynamic  
Routing



6kV Surge  
Protection



5 Years  
Warranty

### Enterprise-class Quality Ensures High Performance

Link Aggregation

IGMP Snooping

VLAN



## Highlight Features

### Enterprise-class Quality Ensures High Performance

Link Aggregation

IGMP Snooping

VLAN

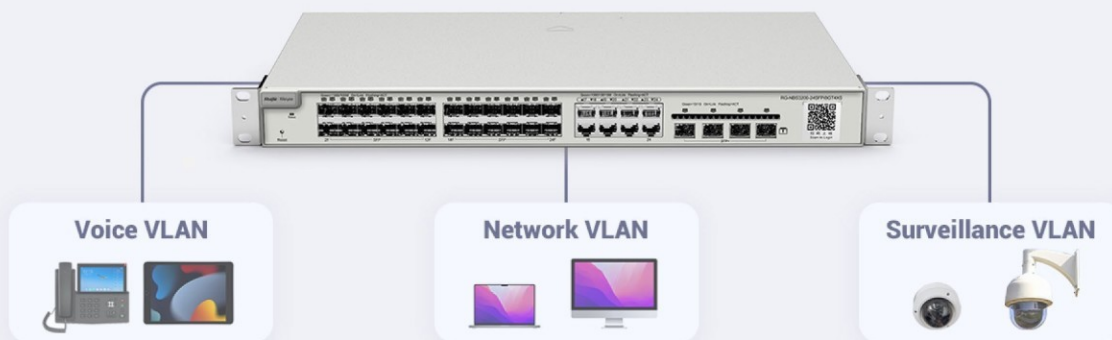


### Enterprise-class Quality Ensures High Performance

Link Aggregation

IGMP Snooping

VLAN



## Highlight Features

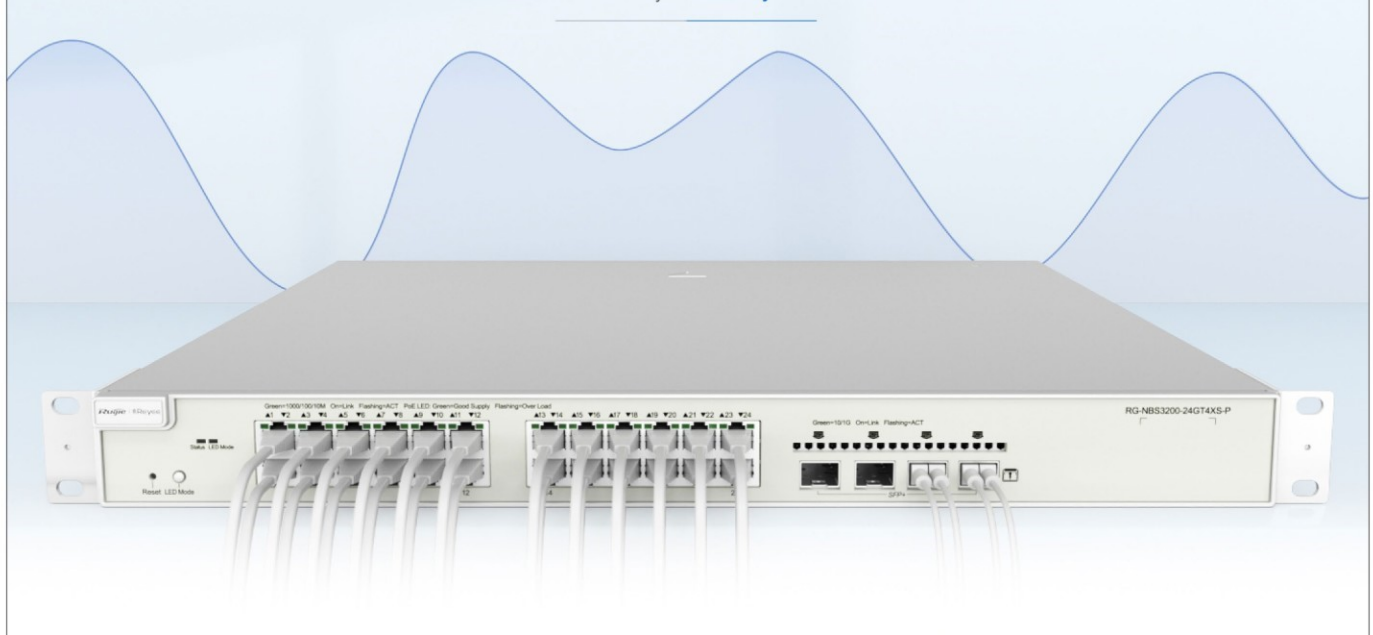
### Multiple Security Policies Protect Your Network

Security   Stability



### Multiple Security Policies Protect Your Network

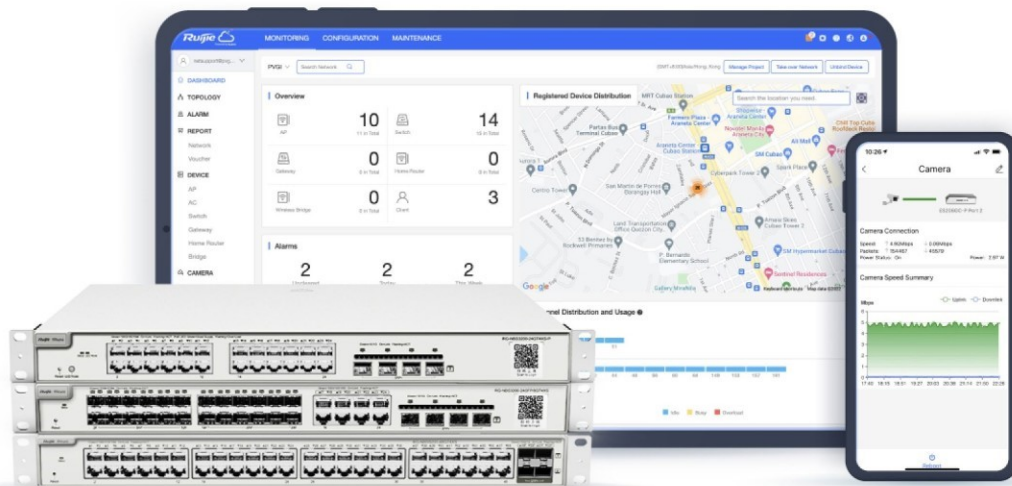
Security   Stability



## Highlight Features

### Cloud, Make Your Business Easy

- SON, zero touch provisioning to Cloud
- Monitor switch statistics at anytime anywhere
- Configure VLANs on Ruijie Cloud APP
- Easy maintenance, save onsite time and cost



# / Product Information

|                  |                     |
|------------------|---------------------|
| Model            | RG-NBS5100-48GT4SFP |
| Product Category | Layer 3             |

# / Hardware Specifications

|                                            |                                                                                                                                                                                                                                        |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                      | RG-NBS5100-48GT4SFP                                                                                                                                                                                                                    |
| Product Information                        |                                                                                                                                                                                                                                        |
| Warranty                                   | 5 years                                                                                                                                                                                                                                |
| Port Specifications                        |                                                                                                                                                                                                                                        |
| Total number of RJ45 ports                 | 48                                                                                                                                                                                                                                     |
| Total number of optical ports              | 4                                                                                                                                                                                                                                      |
| Number of 1GE combo ports                  | No                                                                                                                                                                                                                                     |
| Number of 1GE SFP ports                    | 4                                                                                                                                                                                                                                      |
| Number of 10GE SFP+ ports                  | No                                                                                                                                                                                                                                     |
| Number of 10/100BASE-T ports               | No                                                                                                                                                                                                                                     |
| Number of 10/100/1000BASE-T ports          | 48                                                                                                                                                                                                                                     |
| Number of 10/100/1000/2500BASE-T ports     | No                                                                                                                                                                                                                                     |
| Number of 100/1000/2.5G/5G/10GBASE-T ports | No                                                                                                                                                                                                                                     |
| Module slots                               | No                                                                                                                                                                                                                                     |
| Reset button                               | 1                                                                                                                                                                                                                                      |
| DIP switch                                 | No                                                                                                                                                                                                                                     |
| Power Supply and Consumption               |                                                                                                                                                                                                                                        |
| Power input                                | 220 V AC power supply: <ul style="list-style-type: none"><li>• Rated input voltage: 100 V AC to 240 V AC, 50/60 Hz</li><li>• Maximum input voltage: 90 V AC to 264 V AC, 47 Hz to 63 Hz</li><li>• Maximum input current: 2 A</li></ul> |
| Maximum power consumption                  | 46.4 W                                                                                                                                                                                                                                 |

# Hardware Specifications

| Model                          | RG-NBS5100-48GT4SFP                                            |
|--------------------------------|----------------------------------------------------------------|
| Power output                   | No                                                             |
| Power supply                   | Fixed power supply                                             |
| System Specifications          |                                                                |
| RAM                            | 1 GB                                                           |
| Flash memory                   | 256 MB                                                         |
| Forwarding rate                | 77.38 Mpps                                                     |
| Switching capacity             | 104 Gbps(bit/s)                                                |
| Dimensions and Weight          |                                                                |
| Casing                         | Metal                                                          |
| Product dimensions (W x D x H) | 440 mm x 267.5 mm x 43.6 mm (17.32 in. x 10.53 in. x 1.72 in.) |
| Weight                         | 3.6 kg (7.94 lbs) (without packaging materials)                |
| Shipping weight                | 5.14 kg (11.33 lbs)                                            |
| Environment and Reliability    |                                                                |
| Hot swapping of fan modules    | No                                                             |
| Fan                            | 2 x fixed fans                                                 |
| Cooling                        | Air cooling, side-to-rear airflow                              |
| Acoustic noise                 | 25°C (77°F): 45 dB                                             |
| Mounting options               | Rack                                                           |
| Hot swapping of cables         | Service ports support hot swapping of cables.                  |
| MTBF                           | 400,000 hours                                                  |
| Operating temperature          | 0°C to +50°C (32°F to 122°F)                                   |
| Storage temperature            | −40°C to +70°C (−40°F to +158°F)                               |
| Operating humidity             | 10% RH to 90% RH (non-condensing)                              |
| Storage humidity               | 5% RH to 95% RH (non-condensing)                               |

# / Hardware Specifications

| Model                                   | RG-NBS5100-48GT4SFP                                                                                                                                |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Altitude                                | Operating altitude: -500 m to +5,000 m (-1,640.42 ft. to +16,404.20 ft.)<br>Storage altitude: -500 m to +5,000 m (-1,640.42 ft. to +16,404.20 ft.) |
| Corrosion class                         | No                                                                                                                                                 |
| ESD protection                          | Contact discharge: 6 kV<br>Air discharge: 8 kV                                                                                                     |
| Surge protection                        | Service port: ±6 kV for common mode<br>Power connector: ±6 kV for both common mode and differential mode                                           |
| Certification and Regulatory Compliance |                                                                                                                                                    |
| EMC                                     | EN 55032<br>EN 61000-3-2<br>EN 61000-3-3<br>EN 55035<br>EN 300 386                                                                                 |
| Safety compliance                       | IEC 62368-1                                                                                                                                        |
| Certification                           | CE, FCC                                                                                                                                            |

## Software Specifications

| Model                                     | RG-NBS5100-48GT4SFP |
|-------------------------------------------|---------------------|
| Authentication                            |                     |
| RADIUS                                    | Yes                 |
| 802.1X authentication                     | Yes                 |
| Port-based 802.1X authentication          | Yes                 |
| MAC address-based 802.1X authentication   | Yes                 |
| Guest VLAN                                | Yes                 |
| Basic Configurations                      |                     |
| PoE watchdog                              | No                  |
| Online upgrade                            | Yes                 |
| Ethernet Switching                        |                     |
| Maximum number of VLANs                   | 4094                |
| Maximum number of MAC address entries     | 16000               |
| Interface flow control                    | Yes                 |
| MAC address-based VLAN                    | No                  |
| IP subnet – based VLAN assignment         | No                  |
| IEEE 802.1Q VLAN                          | Yes                 |
| Basic QinQ                                | No                  |
| VLAN configuration supported on LAN ports | Yes                 |
| Voice VLAN                                | Yes                 |
| STP (IEEE 802.1d)                         | Yes                 |
| RSTP (IEEE 802.1w)                        | Yes                 |
| MSTP (IEEE 802.1s)                        | Yes                 |
| LLDP                                      | Yes                 |

## Software Specifications

| Model                                                        | RG-NBS5100-48GT4SFP                       |
|--------------------------------------------------------------|-------------------------------------------|
| LLDP-MED                                                     | Yes                                       |
| Static MAC address                                           | Yes                                       |
| MAC address filtering                                        | Yes                                       |
| Static aggregation                                           | Yes                                       |
| LACP                                                         | Yes                                       |
| Inbound or outbound rate limiting based on interface traffic | Yes                                       |
| Gateway Features                                             |                                           |
| 802.1p priority-based traffic classification                 | Yes                                       |
| DSCP priority-based traffic classification                   | Yes                                       |
| Egress queues based on 802.1p and DSCP priorities            | Yes                                       |
| SP                                                           | Yes                                       |
| WRR                                                          | Yes                                       |
| SP+WRR                                                       | Yes                                       |
| Global QoS                                                   | Yes                                       |
| Interface                                                    |                                           |
| Jumbo frame length (MTU)                                     | 9216 bytes (interface configuration mode) |
| EEE                                                          | Yes                                       |
| Cable test                                                   | Yes                                       |
| IP Routing                                                   |                                           |
| Maximum number of IPv4 static routes                         | 500                                       |
| IPv6 routing table size (network route)                      | 500                                       |
| Maximum number of IPv6 static routes                         | 500                                       |

## Software Specifications

| Model                                | RG-NBS5100-48GT4SFP |
|--------------------------------------|---------------------|
| IPv4 static route                    | Yes                 |
| IPv6 static route                    | Yes                 |
| OSPFv2                               | Yes                 |
| OSPFv3                               | Yes                 |
| IP Service                           |                     |
| Maximum number of ARP entries        | 2000                |
| IPv4 routing table size (host route) | 12000               |
| ARP                                  | Yes                 |
| IPv4 ping                            | Yes                 |
| IPv4 traceroute                      | Yes                 |
| IPv6                                 | Yes                 |
| ICMPv6                               | Yes                 |
| IPv6 ping                            | Yes                 |
| IPv6 traceroute                      | Yes                 |
| DNS client                           | Yes                 |
| DNSv6 client                         | Yes                 |
| DHCP relay                           | Yes                 |
| DHCP server                          | Yes                 |
| DHCP client                          | Yes                 |
| Multicast                            |                     |
| IGMPv1 snooping                      | Yes                 |
| IGMPv2 snooping                      | Yes                 |
| Basic IGMPv3 snooping                | Yes                 |
| Full IGMPv3 snooping                 | Yes                 |

## Software Specifications

| Model                             | RG-NBS5100-48GT4SFP |
|-----------------------------------|---------------------|
| IGMP filtering                    | Yes                 |
| IGMPv1, v2, and v3                | Yes                 |
| Network Management and Monitoring |                     |
| Port mirroring                    | Yes                 |
| Mirroring                         | Yes                 |
| HTTP login                        | Yes                 |
| HTTPS login                       | Yes                 |
| RLOG                              | Yes                 |
| SON                               | Yes                 |
| Syslog                            | Yes                 |
| Client auto-discovery             | Yes                 |
| PoE service failure               | No                  |
| PoE power overload                | No                  |
| SSH                               | No                  |
| Camera detection                  | Yes                 |
| Loop alarm                        | Yes                 |
| MAC address entries               | Yes                 |
| IP address pool conflicts         | Yes                 |
| Full ARP table                    | Yes                 |
| eWeb management                   | Yes                 |
| Ruijie Cloud management           | Yes                 |
| Ruijie Reyee App management       | Yes                 |
| SNMPv1, v2c, and v3               | Yes                 |
| Reliability                       |                     |

## Software Specifications

| Model                                                                         | RG-NBS5100-48GT4SFP                                                                                                          |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| System dual backup                                                            | Yes<br>(Only supported on devices with a factory-installed software version of ReyeeOS 2.320 or later)                       |
| Enabling dual backup for the partition Uboot (based on a single flash memory) | Yes                                                                                                                          |
| Load balancing                                                                | No                                                                                                                           |
| ERPS                                                                          | Yes                                                                                                                          |
| Security                                                                      |                                                                                                                              |
| Maximum number of ACEs                                                        | Number of ACEs in the inbound direction of an interface: 1900<br>Number of ACEs in the outbound direction of an interface: 0 |
| Port isolation                                                                | Yes                                                                                                                          |
| Broadcast storm control                                                       | Yes                                                                                                                          |
| Multicast storm control                                                       | Yes                                                                                                                          |
| Unknown unicast storm control                                                 | Yes                                                                                                                          |
| DHCP snooping                                                                 | Yes                                                                                                                          |
| Standard ACL                                                                  | Yes                                                                                                                          |
| Extended MAC ACL                                                              | Yes                                                                                                                          |
| Extended IP ACL                                                               | Yes                                                                                                                          |
| IPv6 ACL                                                                      | Yes                                                                                                                          |
| IP-MAC-port binding                                                           | Yes                                                                                                                          |
| ARP anti-spoofing                                                             | Yes                                                                                                                          |
| IP source guard                                                               | Yes                                                                                                                          |
| CPU Protection Policy                                                         | Yes                                                                                                                          |
| System Performance Capacity                                                   |                                                                                                                              |
| Recommended camera limit                                                      | 200 W H265: 400<br>400 W H265: 200                                                                                           |

## Package Contents

| Model                     | RG-NBS5100-48GT4SFP                                |
|---------------------------|----------------------------------------------------|
| Device                    |                                                    |
| Device                    | 1                                                  |
| Accessories               |                                                    |
| Rubber pad                | 4                                                  |
| Power cord retention clip | 1                                                  |
| Screw                     | 8 M4 x 8 mm cross recessed countersunk head screws |
| Grounding cable           | 1 x 1 m (3.28 ft.)                                 |
| Power cord                | 1 x 1.5 m (4.92 ft.)                               |
| Rack-mount bracket        | 2                                                  |
| Manual                    |                                                    |
| User Manual               | 1                                                  |
| Warranty Card             | 1                                                  |

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**Ruijie Networks Co., Ltd.**

Official Website: <https://Reyee.Ruijie.com>