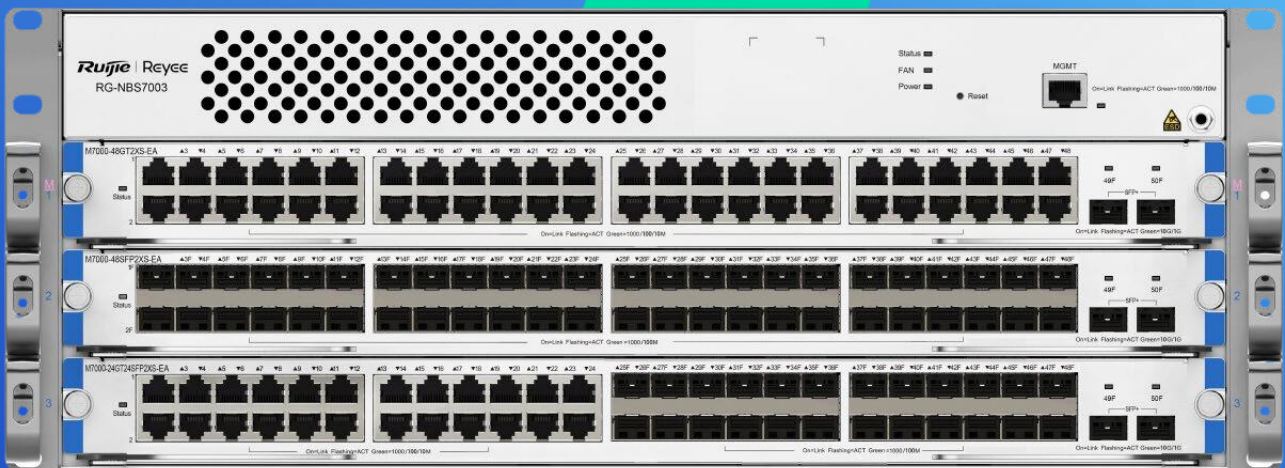


RG-NBS7003

Layer 3 Chassis Cloud Managed Switch

DATASHEET

[Explore More](#)



Highlights

- Modular design provides scalability and flexibility
- High-level redundancy, ensuring nonstop service
- Whole network solution specially designed for SMB Scenarios
- Lifetime management on Ruijie Cloud at anytime anywhere

Highlight Features

RG-NBS7003

Reyee First Chassis Switch Designed for SMB

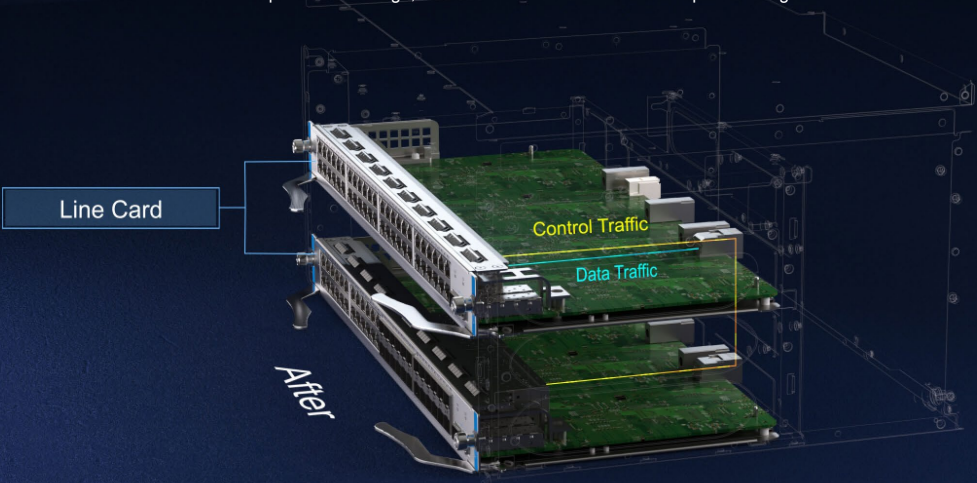


4*RU 3 Service Module
Chassis Core Switch

 7 Optional Line Cards	 32,000 MAC Address	 8,000 ARP Table	 480 Gbps Switching Capacity	 360 Mpps Packet Forwarding Rate
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Architecture Innovation: Higher Performance, Lower Cost

New traffic & chip-intensive design, each line card can be used as a supervisor engine module



Line Card


Control Traffic

Data Traffic

After

Modular Design: Scalability, and Flexibility

Support 7 types of line cards, up to 48 ports full 10 Gigabit



M7000-8XS-EA

M7000-24GT2XS-EA

M7000-48SFP2XS-EA

M7000-16XS-EA

M7000-48GT2XS-EA

M7000-24GT24SFP2XS-EA

M7000-24SFP2XS-EA

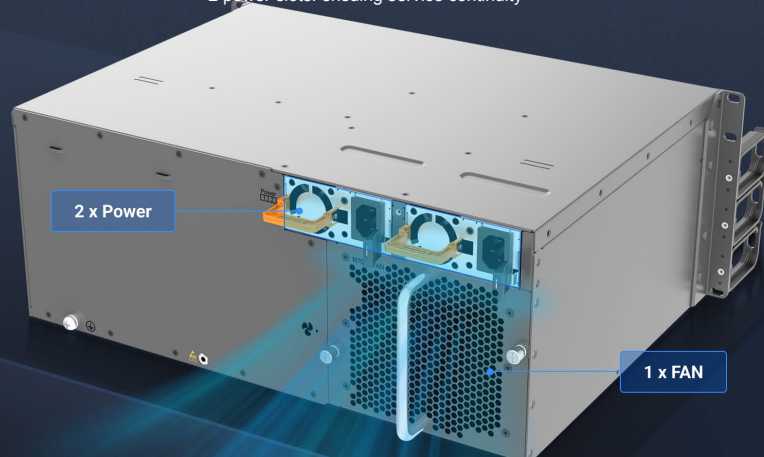
Highlight Features

High-Level Redundancy, Ensuring Nonstop Service

Redundant Modules

Virtual Cluster Switching (VCS)

2 power slots: ensuring service continuity

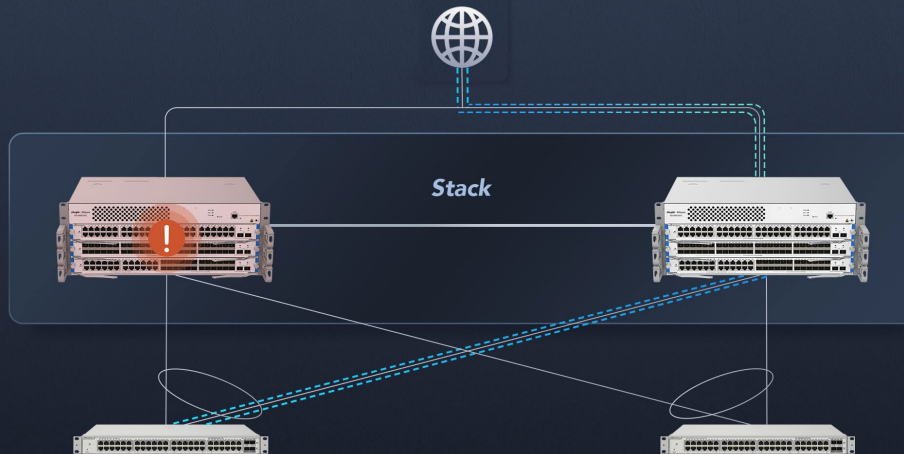


High-Level Redundancy, Ensuring Nonstop Service

Redundant Modules

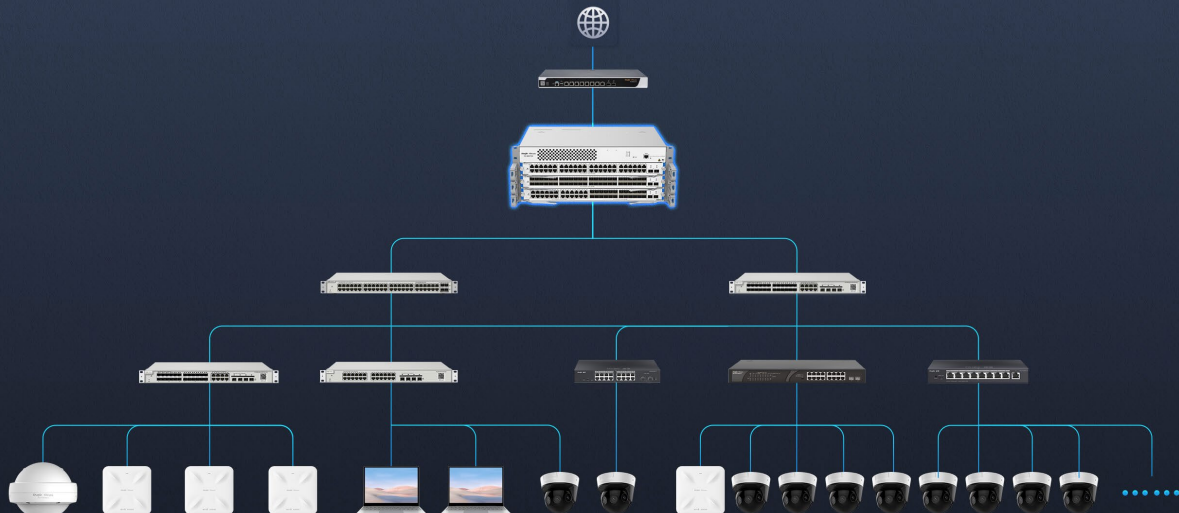
Virtual Cluster Switching (VCS)

Virtual Cluster Switching (VCS): service failover within seconds



Whole Network Solution Specially Designed for SMB Scenarios

Up to 2000 terminal devices or 1000 CCTV (2mp H.265) can be accessed



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



Specifications

Specifications	RG-NBS7003
Basic	
Chassis	Yes
Number of Line Card Slots	3
Layer	L3
Switching Capacity	480 Gbps
Forwarding Rate	360 Mpps
Buffer Size	16 Mbits
ARP Table Size	8000
Flash Memory	Supervisor engine/line card: 256 MB
SDRAM	Supervisor engine/line card:: DDRIII 1 GB
MAC Address Table Size	32000
Max. Number of VLANs	4094
Dimensions (W x D x H)	Chassis without cable management bracket: 442 mm x 313 mm x 175 mm, 4 RU EA card: 438.5 mm x 196 mm x 40.2 mm
Net Weight	9.6 kg
Mean Time Between Failure (MTBF)	400000H
Safety Compliance	IEC 62368-1
Warranty	5
Layer2 features	
Jumbo Frame Length (MTU)	9216 Bytes(Per-port MTU)
Flow Control	Yes
Port Isolation / Protected Port	Yes

Specifications	RG-NBS7003
STP (IEEE 802.1D)	Yes
RSTP (IEEE 802.1w)	Yes
MSTP (IEEE 802.1s)	No
PortFast	Yes
BPDU Guard	Yes
Auto Errdisable Recovery	Yes
Link Aggregation	Yes
Max. Number of LAGs	16
Max. Members per LAG	8
Unknown Unicast Storm Control	Yes
Broadcast Storm Control	Yes
Multicast Storm Control	Yes
SPAN	Yes
RSPAN	No
ERSPAN	No
VLAN Range	1-4094
Port-based VLAN	Yes
MAC-based VLAN	No
IP-based VLAN	No
Voice VLAN	Yes
RLDP	Yes
LLDP	Yes
LLDP-MED	Yes
LLDP-PoE	No
Cable Test	Yes

Specifications	RG-NBS7003
IGMP Snooping v1	Yes
IGMP Snooping v2	Yes
IGMP Snooping v3(Basic)	Yes
Max. Number of SVIs	500
IPv4 Ping	Yes
IPv6 Ping	Yes
Traceroute	Yes
IP Standard ACL	Yes
MAC Extended ACL	Yes
IP Extended ACL	Yes
Port-Level Rate Limiting (Ingress/Egress)	Yes
DNS Client	Yes
SNMP v1	Yes
SNMP v2c	Yes
SNMP v3	Yes
Web Management	Yes
HTTP	Yes
HTTPS	Yes
Ruijie Cloud Management	Yes
Ruijie Reyee App Management	Yes
IP-based Self-Organizing Network (SON)	Yes
Camera Detection	Yes
Loop Prevention	Yes
Loop Notification	Yes
IP Source Guard	Yes

Specifications	RG-NBS7003
Anti-ARP Spoofing	Yes
DHCP Snooping	Yes
DHCP Client	Yes
AAA(Authentication,Authorization,Accounting)	No
IEEE 802.1X Authentication	Yes
Digital Diagnostic Monitoring (DDM)	Yes
Number of ACEs	In-1900 Out-0
Number of VCS Members	2
DHCP Relay	Yes
RADIUS	Yes
CPU Protection Policy (CPP)	Yes
MQTT	Yes
QoS	Yes
SON Priority	4769
Web Authentication	Yes
Layer 3 features	
Static Routing	Yes
DHCP Server	Yes
RIP	Yes
RIPng(RIP Next Generation)	Yes
OSPFv2(Open Shortest Path First Version 2)	Yes
OSPFv3	Yes
Virtual Cluster Switching (VCS)	Yes

Specifications	RG-NBS7003
Hardware Specifications	
Reset Button	Yes
Cable Hot-Swappable	Yes
Number of Power Supply Slots	2
Power Consumption	Chassis: RG-NBS7000: < 50 W Line Card: M7000-48GT2XS-EA < 60 W M7000-24GT24SFP2XS-EA < 80 W M7000-48SFP2XS-EA < 90 W M7000-8XS-EA < 40W M7000-24GT2XS-EA < 50 W M7000-24SFP2XS-EA <70 W
EEE	Yes
Port Surge Protection	Common mode: 6 KV
Power Supply Surge Protection	Common Mode 6KV Differential mode 6KV
Fan Module Hot-Swappable	Yes
Number of Fans	1
Airflow	front to rear and right to rear airflow
Fan Speed Control	Adjust according to ambient temperature
Acoustic Noise Level	35°C, the noise value of the equipment in dB is not available now. 50°C, the noise value of the equipment in dB is not available now.
Operating Temperature	0 to 50°C
Storage Temperature	-40°C to +70°C
Operating Humidity	10% to 90% RH(non-condensing)
Storage Humidity	5% to 95% RH(non-condensing)

Specifications	RG-NBS7003
Electrostatic Discharge (ESD) Protection	ESD: 6 KV contact/8 KV air
Casing	Metal
Mounting	Rack installation
LEDs	System: SYS(Green) Per RJ45 Ports: LINK/ACT(Green) Per SFP Interface: LINK/ACT(Green)
Operating Altitude (m)	-500~5000M
Certification	CE
EMC	EN 55032:2015+AC:2016 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 55035:2017 ETSI EN 300 386 V2.1.1 (2016-07)

Power Supply and Fan

RG-PA300I-FS	RG-NBS7003 Power Module (support redundancy,AC, 300W)
RG-PA460I-FS	RG-NBS7003 Power Module (support redundancy,AC, 460W)
M7003-FAN	NBS7003-FAN

Line Card & Service Module

M7000-24GT2XS-EA	24 Gigabit Ethernet copper port (RJ45) + 2 10-gigabit Ethernet fiber port (SFP+,LC)
M7000-48GT2XS-EA	48 Gigabit Ethernet copper port (RJ45) + 2-port 10-gigabit Ethernet fiber port (SFP+,LC)
M7000-24SFP2XS-EA	24 Gigabit fiber port (SFP,LC) + 2 10-Gigabit Ethernet fiber port (SFP+,LC)
M7000-48SFP2XS-EA	48 Gigabit fiber port (SFP,LC) + 2 10-Gigabit Ethernet fiber port (SFP+,LC)
M7000-24GT24SFP2XS-EA	24 Gigabit Ethernet copper port (RJ45)+ 24 Gigabit fiber port (SFP,LC)+ 2 10-gigabit Ethernet fiber port (SFP+,LC)
M7000-8XS-EA	8 10-Gigabit Ethernet fiber port (SFP+,LC)
M7000-16XS-EA	16 10-gigabit Ethernet fiber port (SFP+,LC)

Ruijie | RYCE

 **Redefine your easy network**

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