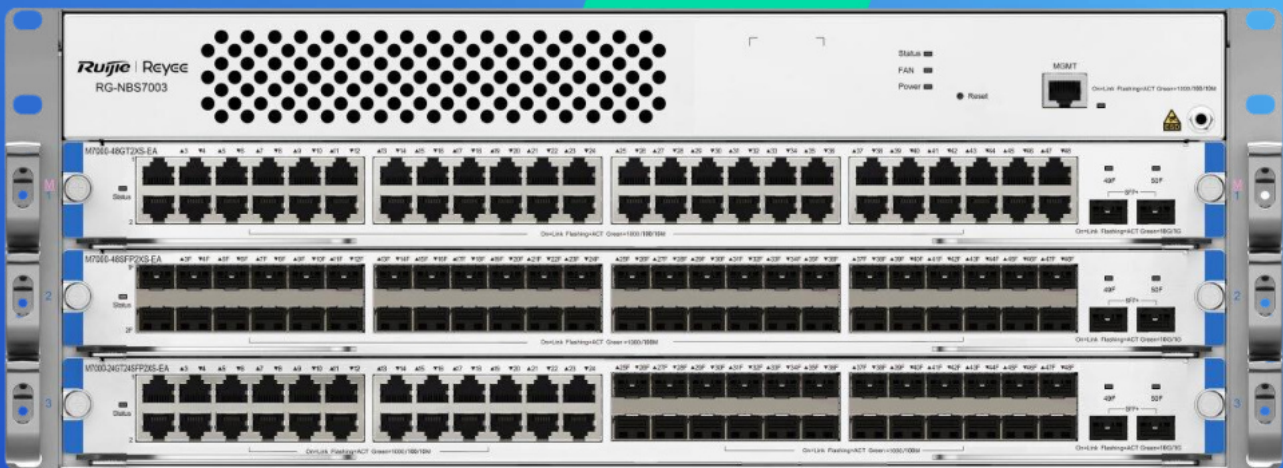


RG-NBS7003

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

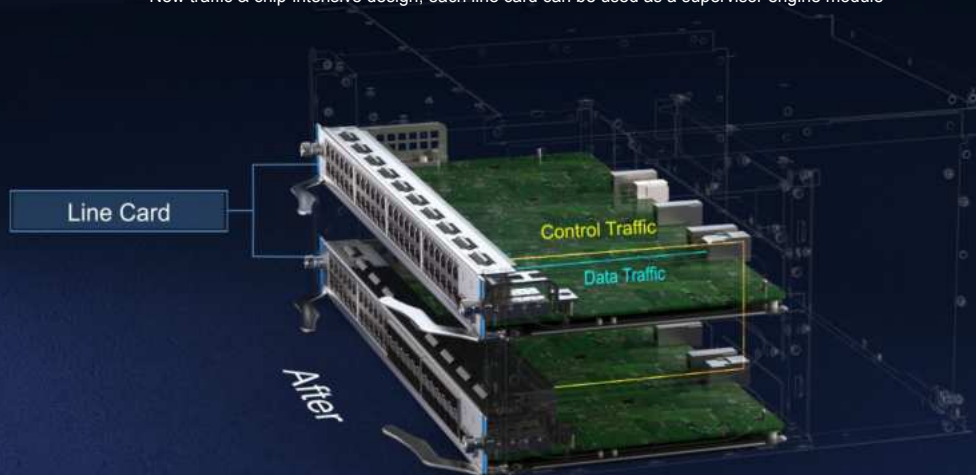
Highlight Features

RG-NBS7003 Reyee First Chassis Switch Designed for SMB

7 Optional Line Cards MAC 32,000 MAC Address ARP 8,000 ARP Table 480 Gbps Switching Capacity 360 Mpps Packet Forwarding Rate

Architecture Innovation: Higher Performance, Lower Cost

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



Modular Design: Scalability, and Flexibility

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



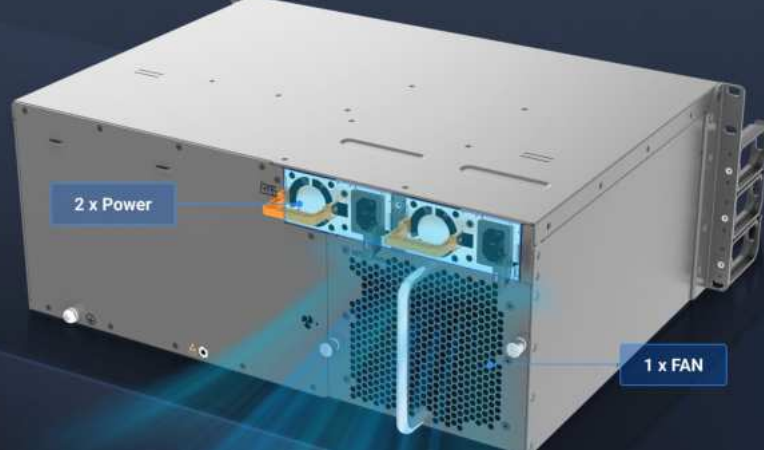
Highlight Features

High-Level Redundancy, Ensuring Nonstop Service

Redundant Modules

Virtual Cluster Switching (VCS)

2 power slots: ensuring service continuity

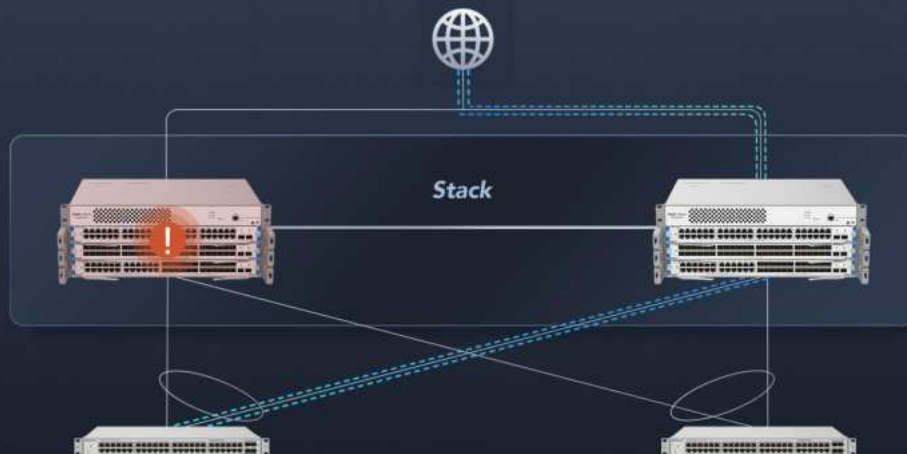


High-Level Redundancy, Ensuring Nonstop Service

Redundant Modules

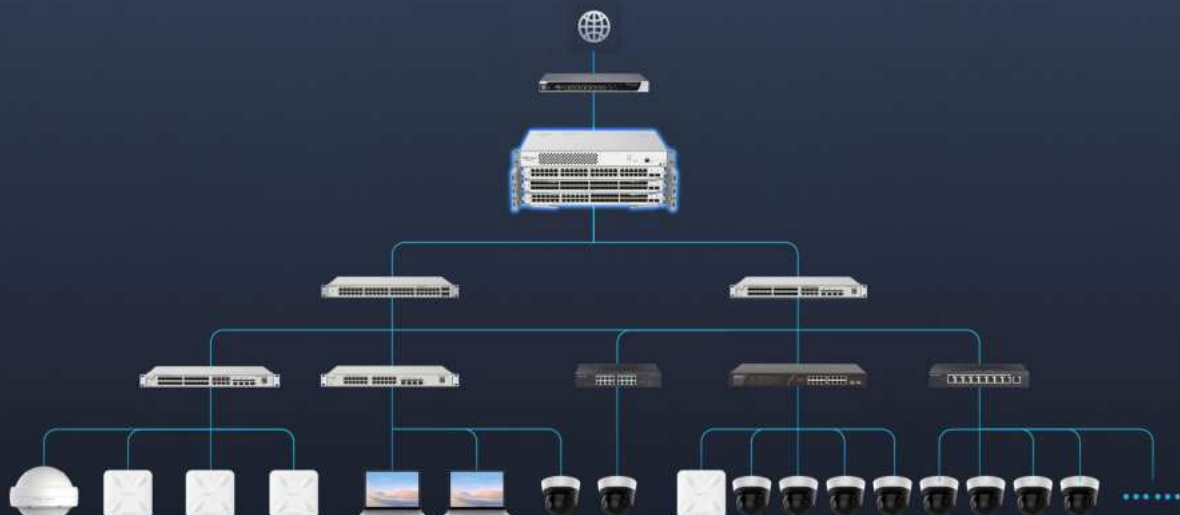
Virtual Cluster Switching (VCS)

Virtual Cluster Switching (VCS): service failover within seconds



Whole Network Solution Specially Designed for SMB Scenarios

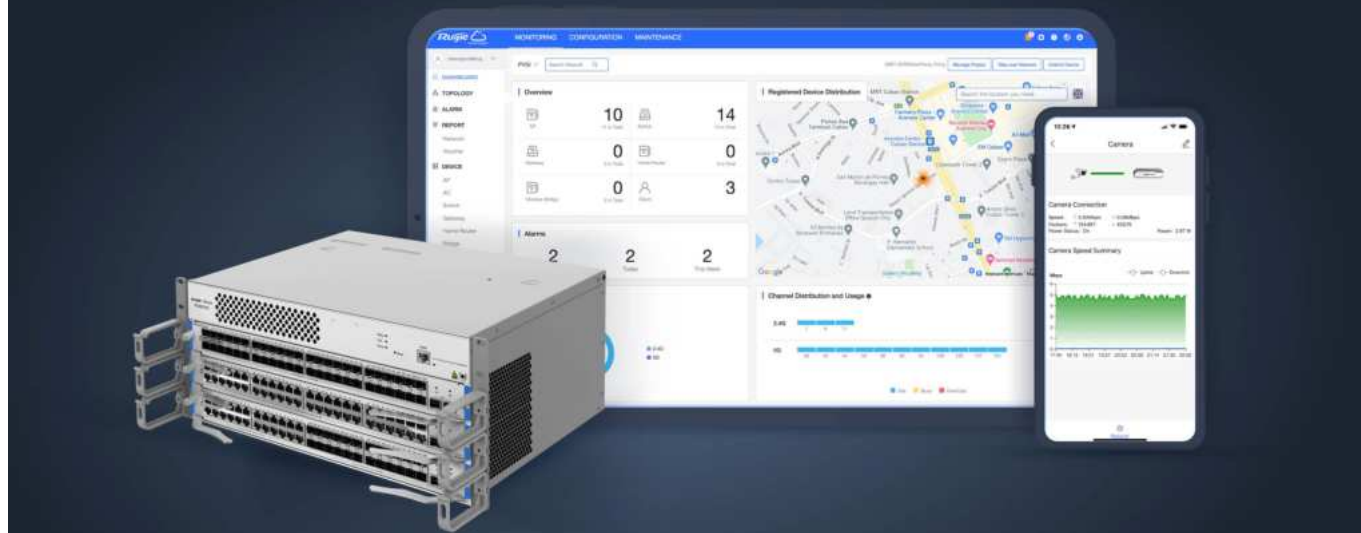
Up to 2000 terminal devices or 1000 CCTV (2mp H.265) can be accessed



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
Hardware Specifications		
System Specifications	RAM	Supervisor engine/line card:: DDRIII 1 GB
	Flash memory	Supervisor engine/line card: 256 MB
	Recommended camera limit	Line Card : 200W H265:400 400W H265:200
	Forwarding rate	360 Mpps
	Switching capacity	480 Gbps
	Maximum number of VLANs	4094
	Maximum number of MAC address entries	32000
	Maximum number of ARP entries	8000
	Routing table capacity (main unit routing)	12000
	Maximum number of IPv4 static routes	2000
	Routing table capacity (network routing)	2000
	Maximum number of IPv6 static routes	500
	Maximum number of ACEs	In-1900 Out-0
	Number of VCS members	2
Power	Maximum 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

Specifications		RG-NBS7003
		M7000-24SFP2XS-EA <70 W
	Power output	RG-PA300I-F: 90 V AC to 290 V AC ~300 W RG-PA460I-F: 90 V AC to 290 V AC~460 W
	Input power supply	System power module: 2 PoE module: not supported
	Power module	2
FAN	Hot swapping of fan modules	Supported
	Fan	1
	Fan speed adjustment	Adjust according to ambient temperature
	Heat dissipation	Chassis: RG-NBS7000: <171 BTU/hr(220V/50Hz) Line Card: (220V/50Hz) M7000-48GT2XS-EA < 205.2 BTU/hr(220V/50Hz) M7000-24GT24SFP2XS-EA < 273.6BTU/hr(220V/50Hz) M7000-48SFP2XS-EA < 307.8 BTU/hr(220V/50Hz) M7000-8XS-EA < 136.8 BTU/hr(220V/50Hz) M7000-24GT2XS-EA < 171 BTU/hr(220V/50Hz) M7000-24SFP2XS-EA <239.4 BTU/hr(220V/50Hz)
	Acoustic noise	<60dB (when the device works normally)
Button	Reset button	Yes
EMC	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)
Safety Compliance	Safety compliance	IEC 62368-1
Certification	CE, FCC	CE
Mounting	Mounting	Rack installation
Casing	Casing	Metal
Cable Hot-Swappable	Hot swapping of cables	Supported by all ports

Specifications		RG-NBS7003
Mean Time Between Failure (MTBF)	MTBF	400000H
Warranty	Warranty Card	5
EEE	EEE	Yes
Environment and Reliability	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)
	Operating altitude	-500~5000M
	ESD protection	ESD: 6 kV contact/8 kV air
	Surge protection	Common mode: 6 kV
	Surge protection	Common Mode 6kV Differential mode 6kV
Package Contents	Dimensions (W x D x H)	Chassis without cable maN/Agement bracket: 442 mm x 313 mm x 175 mm, 4 RU EA card: 438.5 mm x 196 mm x 40.2 mm
	Weight	9.6 kg
	Shipping weight	13kg
	Rack-mount bracket	2
	Screw	M6 Screw*12+M3 Screw*8
	nut	M6 unt*12
	User Manual	1
	Input power supply	System power module: 2 PoE module: not supported
	Warranty Card	1
	L2	
Jumbo Frame	Jumbo frame length (MTU)	9216 Bytes(Per-port MTU)

Specifications		RG-NBS7003
port	Port flow control	Yes
	Port isolation	Yes
	EEE	Yes
	Cable Test	Yes
VLAN	IEEE802.1Q VLAN	Yes
	Port-based VLAN	Yes
	Voice VLAN	Yes
STP	STP (IEEE 802.1d)	Yes
	RSTP (IEEE 802.1w)	Yes
	MSTP (IEEE 802.1s)	Yes
LLDP	LLDP	Yes
	LLDP-MED	Yes
SPAN	Port mirroring	Yes
	Mirroring	Yes
IGMP	IGMPv1 snooping	Yes
	IGMPv2 snooping	Yes
	Basic IGMPv3 snooping	Yes
	Full IGMPv3 snooping	Yes
	IGMP filtering	Yes
Mac Address	Static MAC address	Yes
	MAC address filtering	Yes
Link Aggregation	Static aggregation	Yes
	Load balancing	Yes
	LACP	Yes
Storm Suppression	Broadcast storm control	Yes

Specifications		RG-NBS7003
	Multicast storm control	Yes
	Unknown unicast storm control	Yes
L3		
ARP	ARP	Yes
IPv4	IPv4 ping	Yes
	IPv4 static route	Yes
	IPv4 traceroute	Yes
IPv6 Configuration	IPv6 static route	Yes
	ICMPv6	Yes
	IPv6 ping	Yes
	IPv6 traceroute	Yes
OSPF	OSPFv2	Yes
	OSPFv3	Yes
IGMP	IGMP V1, V2, V3	Yes
DNS	DNS client	Yes
	DNSv6 client	Yes
DHCP	DHCP relay	Yes
	DHCP snooping	Yes
	DHCP server	Yes
	DHCP client	Yes
HTTP v6	HTTP Access by IPv6	Yes
High Features		
ACL	Standard ACL	Yes
	Extended MAC ACL	Yes
	Extended IP ACL	Yes

Specifications		RG-NBS7003
	IPv6 ACL	Yes
QoS	802.1p traffic classification	Yes
	DSCP-based traffic classification	Yes
	Egress queues based on 802.1p and DSCP	Yes
	SP	Yes
	WRR	Yes
	SP+WRR	Yes
	Global QoS	Yes
	Interface-based rate limiting (ingress/egress)	Yes
Online Upgrade	Online Upgrade	Yes
RLOG	RLOG	Yes
Self-Organizing Network	SON	Yes
syslog	System log	Yes
Client Identification	Client discovery	Yes
ALARM	Camera detection	Yes
	Loop alarm	Yes
	MAC address entries	Yes
	IP address pool conflicts	Yes
	Full ARP table	Yes
Radius	RADIUS	Yes
802.1X	802.1X authentication	Yes
	Port-based 802.1X authentication	Yes
	MAC-based 802.1X authentication	Yes

Specifications		RG-NBS7003
	Guest VLAN	Yes
IP+MAC Port Binding	IP-MAC-port binding	Yes
Anti-ARP Spoofing	ARP anti-spoofing	Yes
IP Source Guard	IP source guard	Yes
CPU Protection Policy (CPP)	CPU Protection Policy	Yes
Management Features		
Web Management	eWeb	Yes
MACC	Ruijie Cloud	Yes
APP	Ruijie Reyee App	Yes
SNMP	SNMPv1, v2c, and v3	Yes

/ 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)

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