

RG-NBS7006

Layer 3 Chassis Cloud Managed Switch

DATASHEET

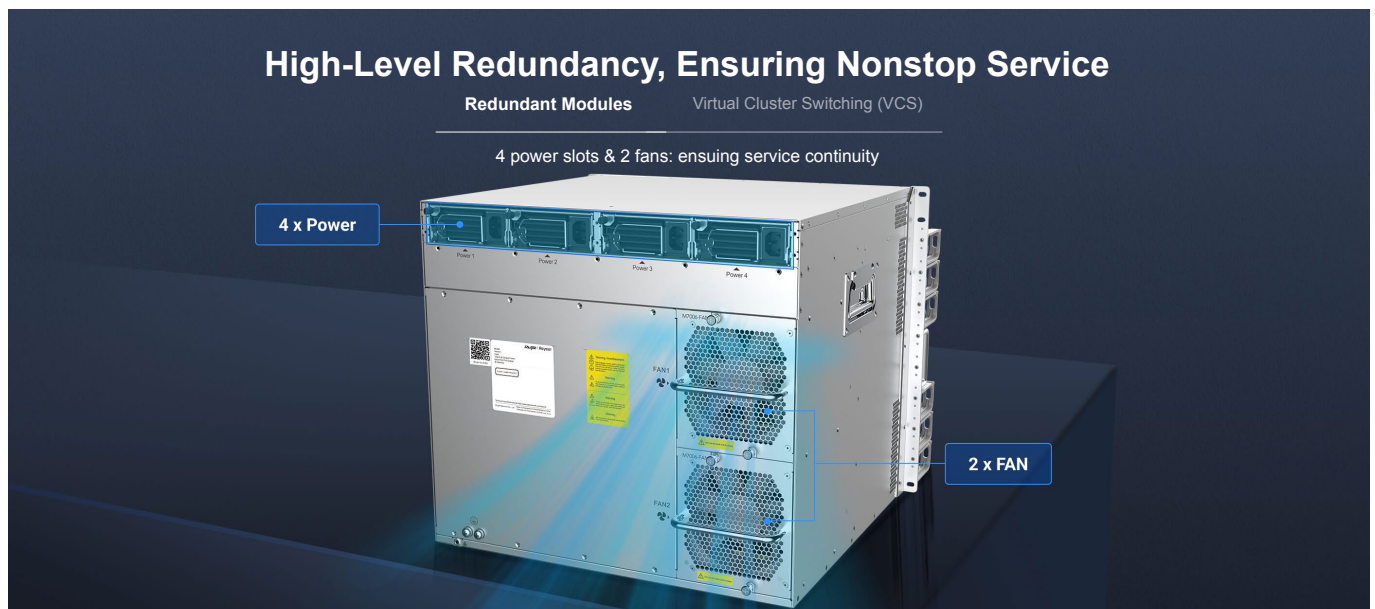
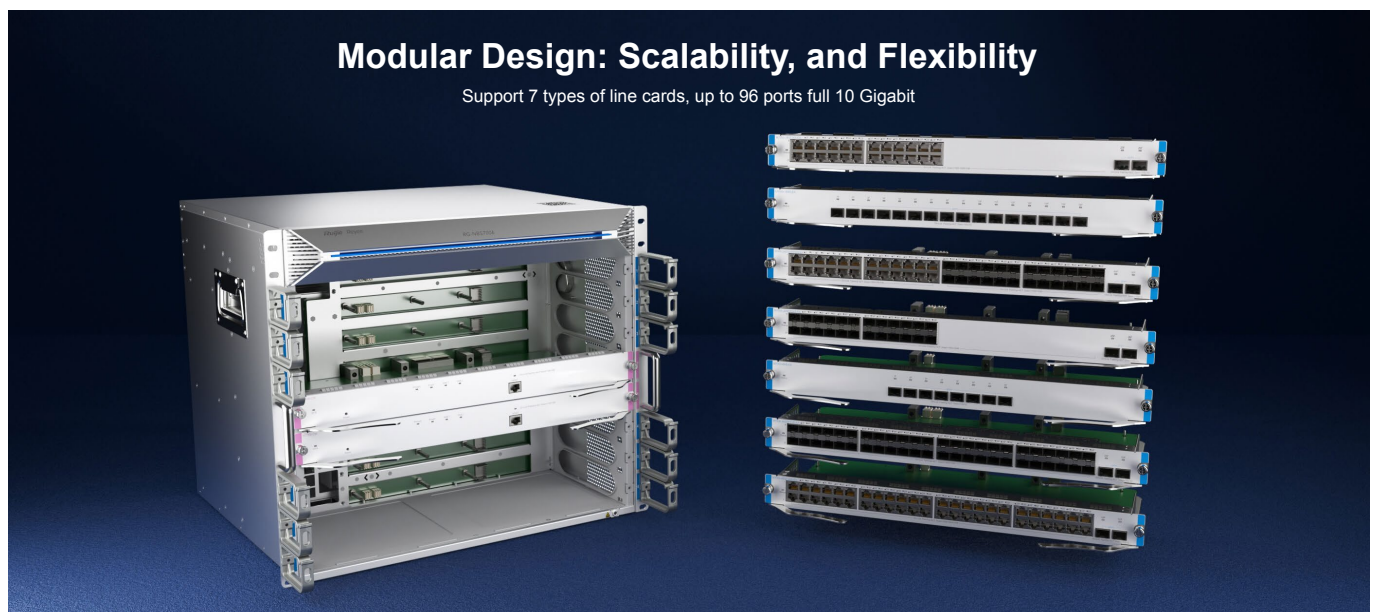
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Highlights

- 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



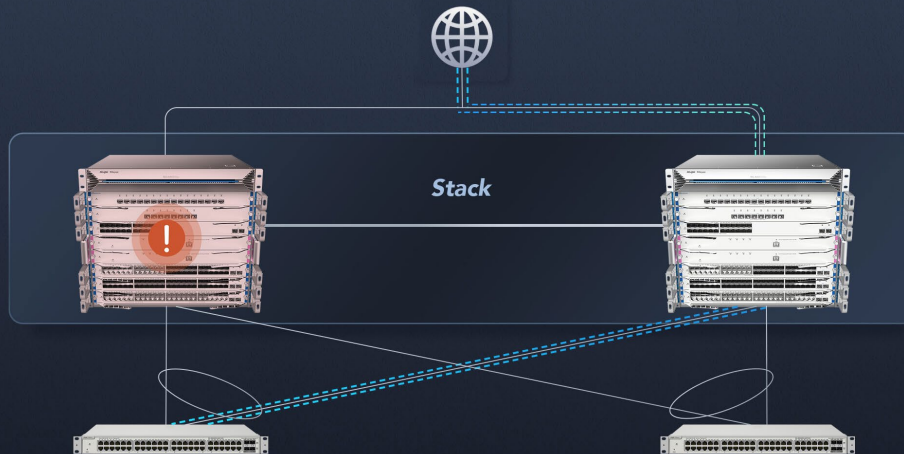
Highlight Features

High-Level Redundancy, Ensuring Nonstop Service

Redundant Modules

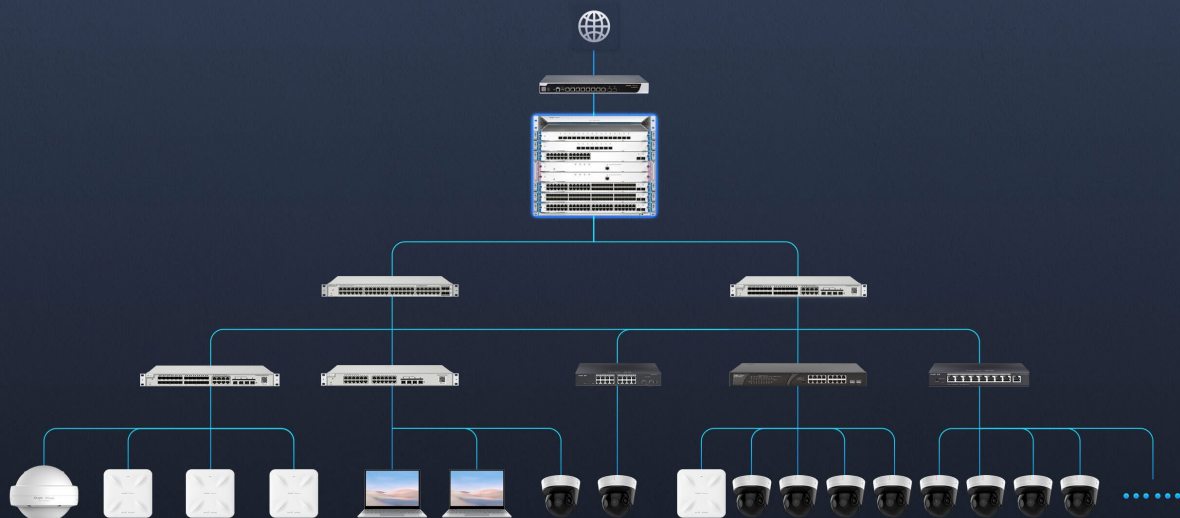
Virtual Cluster Switching (VCS)

Virtual Cluster Switching (VCS): service failover within seconds



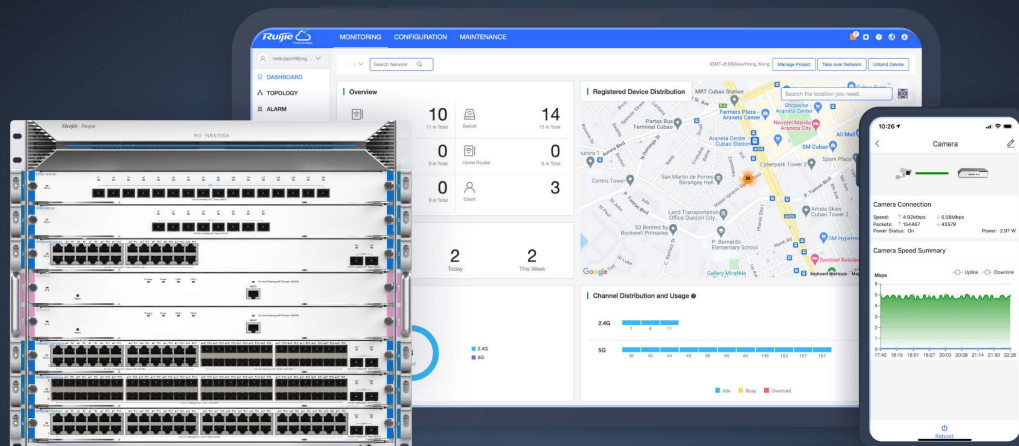
Whole Network Solution Specially Designed for SMB Scenarios

Up to 4000 terminal devices or 2000 CCTV (2mp H.265) can be accessed



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		RG-NBS7006
Hardware Specifications		
Product Information	Warranty	5 years
	Product category	Layer 3
Port Specifications	Total number of RJ45 ports	Determine the quantity based on the type and number of line cards.
	Number of 10GE SFP+ ports	Determine the quantity based on the type and number of line cards.
	Number of 10/100/1000BASE-T ports	Determine the quantity based on the type and number of line cards.
Interface Specifications	Module slots	2 supervisor module slots 6 line card slots 4 system power module slots"
	Reset button	1
Certification and Regulatory Compliance	EMC	EN 55032
		EN 61000-3-2
		EN 61000-3-3
		EN 55035
		EN 300 386
	Safety compliance	IEC 62368-1
	Certification	CE
Power Supply and Consumption	Power input	RG-PA600I-FS (AC input): Rated input voltage: 100 V AC to 240 V AC, 50/60 Hz Maximum input voltage: 90 V AC to 264 V AC, 47 Hz to 63 Hz Maximum input current: 10 A
		100 W
		RG-PA600I-FS: 90 V AC to 290 V AC: 12 V DC (output voltage), 50 A (maximum output current)

Specifications		RG-NBS7006
	Power supply	Power module
Dimensions and Weight	Casing	Metal
	Product dimensions (W x D x H)	Chassis without cable management bracket: 442 mm x 410 mm x 396 mm (17.4 in. x 16.14 in. x 15.59 in.) EA card: 438.5 mm x 196 mm x 40.2 mm (17.26 in. x 7.72 in. x 1.58 in.) CM card: 438.5 mm x 196 mm x 40.2 mm (17.26 in. x 7.72 in. x 1.58 in.)
	Weight	25 kg (55.12 lbs) (including the empty chassis and two fan modules, without packaging materials)
	Shipping weight	30 kg (66.14 lbs) (including packaging materials, empty chassis, and two fan modules)
System Specifications	RAM	Supervisor module/Line card: 1 GB DDR3
	Flash memory	Supervisor module/Line card: 256 MB
	Forwarding rate	1440 Mpps
	Switching capacity	1.92 Tbps(bit/s)
Environment and Reliability	Hot swapping of fan modules	Yes
	Fan	2 x fixed fans
	Cooling	Device: Air cooling, front-to-rear airflow + left-to-rear airflow + right-to-rear airflow Line card: Air cooling, right-to-rear airflow Power module: Air cooling, front-to-rear airflow + side-to-rear airflow
	Acoustic noise	35°C (95°F): 55 dB 50°C (122°F): 50 dB
	Mounting options	Rack

Specifications		RG-NBS7006
	Hot swapping of cables	Power connectors, all ports of line cards, and all ports of the supervisor module 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)
	Altitude	Operating altitude: –500 m to +5,000 m (–1,640.42 ft. to +16,404.20 ft.) Storage altitude: –500 m to +5,000 m (–1,640.42 ft. to +16,404.20 ft.)
	ESD protection	Contact discharge: 6 kV Air discharge: 8 kV
	Surge protection	Service port: ±6 kV for common mode Power connector: ±6 kV for both common mode and differential mode
Software Specifications		
Basic Configurations	Online upgrade	Yes
System Performance Capacity	Recommended camera limit	RG-NBS7006: Number of line cards x Recommended number of cameras per service interface board Recommended number of cameras connected to the supervisor module: Not supported Recommended number of cameras connected to a line card: 200 W H265: 400 400 W H265: 200"
Interface	Jumbo frame length (MTU)	9216 bytes (interface configuration mode)

Specifications		RG-NBS7006
	EEE	Yes
	Cable test	Yes
Reliability	Number of VCS members	2
	System dual backup	Yes
	Enabling dual backup for the partition Uboot (based on a single flash memory)	Yes
Authentication	RADIUS	Yes
	802.1X authentication	Yes
	Port-based 802.1X authentication	Yes
	MAC address-based 802.1X authentication	Yes
	Guest VLAN	Yes
Multicast	IGMPv1 snooping	Yes
	IGMPv2 snooping	Yes
	Basic IGMPv3 snooping	Yes
	Full IGMPv3 snooping	Yes
	IGMP filtering	Yes
	IGMPv1, v2, and v3	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

Specifications		RG-NBS7006
	WRR	Yes
	SP+WRR	Yes
	Global QoS	Yes
IP Routing	Maximum number of IPv4 static routes	2000
	IPv6 routing table size (network route)	2000
	Maximum number of IPv6 static routes	500
	IPv4 static route	Yes
	IPv6 static route	Yes
	OSPFv2	Yes
	OSPFv3	Yes
IP Service	Maximum number of ARP entries	8000
	IPv4 routing table size (host route)	12000
	ARP	Yes
	IPv4 ping	Yes
	IPv4 traceroute	Yes
	ICMPv6	Yes
	IPv6 ping	Yes
	IPv6 traceroute	Yes
	DNS client	Yes
	DNSv6 client	Yes
	DHCP relay	Yes
	DHCP server	Yes
	DHCP client	Yes
Security	Maximum number of ACEs	Number of ACEs in the inbound direction of an interface: 1900

Specifications		RG-NBS7006
		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
Ethernet Switching	Maximum number of VLANs	4094
	Maximum number of MAC address entries	32000
	Interface flow control	Yes
	IEEE 802.1Q VLAN	Yes
	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

Specifications		RG-NBS7006
	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
Network Management and Monitoring	Fan speed adjustment	Intelligent speed adjustment
	Port mirroring	Yes
	Mirroring	Yes
	HTTP login	Yes
	HTTPS login	Yes
	RLOG	Yes
	SON	Yes
	Syslog	Yes
	Client auto-discovery	Yes
	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
Package Contents		

Specifications		RG-NBS7006
Device	Device	1
Manual	User Manual	1
	Warranty Card	1
Accessories	Rack-mount bracket	2
	Screw	12 M6 x 16 mm cross recessed countersunk head screws
		18 M3 x 10 mm cross recessed countersunk head screws
		12 M6 cage nuts
	Grounding cable	1 x 2 m (6.56 ft.)

/ Power Supply and Fan

RG-PA600I-FS	RG-NBS7006 Power Module (support redundancy, AC, 600W)
M7006-FAN	NBS7006-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)
M7006-CM	Supervisor Engine Module

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