

# RG-NBS5300-8MG2XS-UP Multi-Gigabit Layer 3 Cloud Managed Switch

DATASHEET

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## Highlights

- 2.5 Gbps ports smash the gigabit barrier and unlock the full potential of WiFi 6 APs.
- 802.3bt/at/af-compliant PoE++ ports with a total power supply of 370W.
- IP-MAC-Port Binding, ACL, Port Security, Storm Control, DHCP Snooping, 802.1X, Radius Authentication.
- Lifetime management on Ruijie Cloud at anytime anywhere.

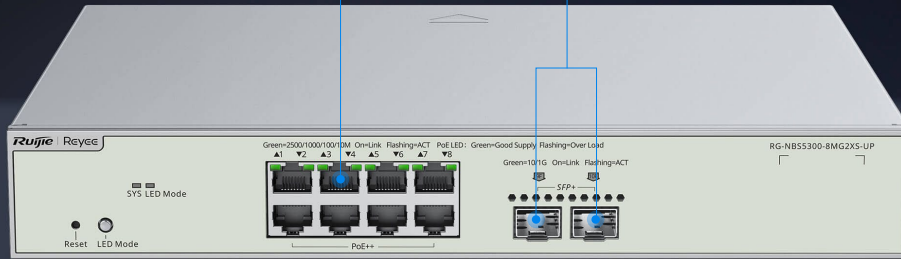
# Highlight Features

## RG-NBS5300-8MG2XS-UP

8-Port Multi-Gigabit Layer 3 Cloud Managed Switch, 2-SFP+ Uplink

8 x 2.5 G RJ45 PoE ports  
Each port support max 90W

2 X 10G SFP



8 x 2.5G PoE+ Ports  
for WiFi 6



PoE++ Budget  
370W

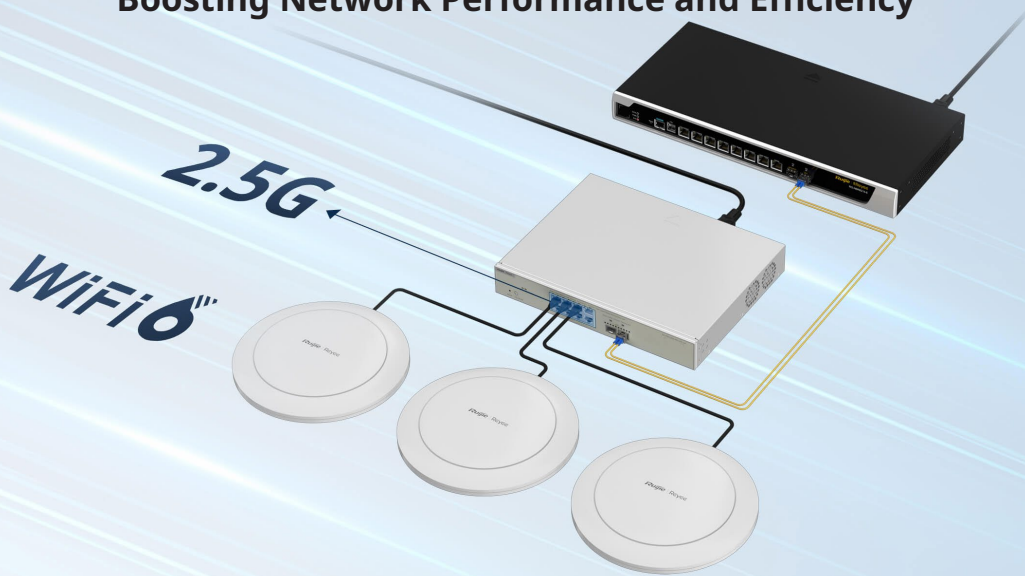


2 x 10G SFP  
Uplink



Layer 3  
Cloud Management

## Integration with WiFi 6 AP, Boosting Network Performance and Efficiency



## Highlight Features

90W PoE Power Delivery  
Meet High-Power Device Demands

90W (802.3bt)



Enterprise-class Quality Ensures High Performance

[Link Aggregation](#)   IGMP Snooping   VLAN



# Highlight Features

## Enterprise-class Quality Ensures High Performance

Link Aggregation

**IGMP Snooping**

VLAN

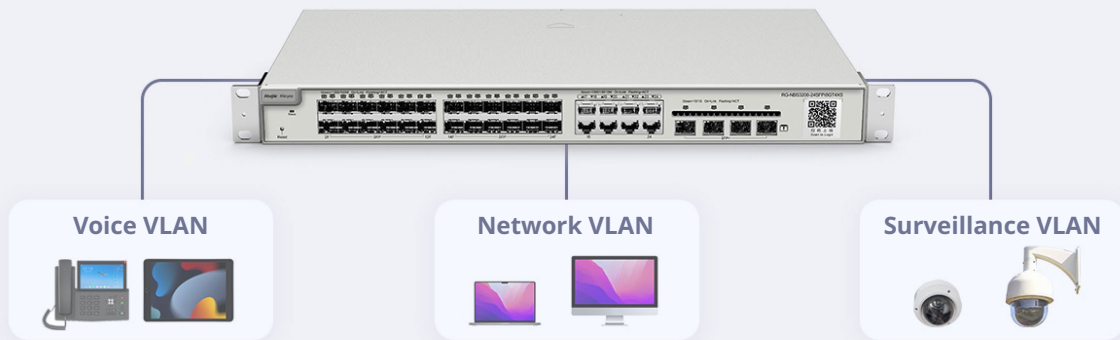


## Enterprise-class Quality Ensures High Performance

Link Aggregation

IGMP Snooping

**VLAN**



# Highlight Features

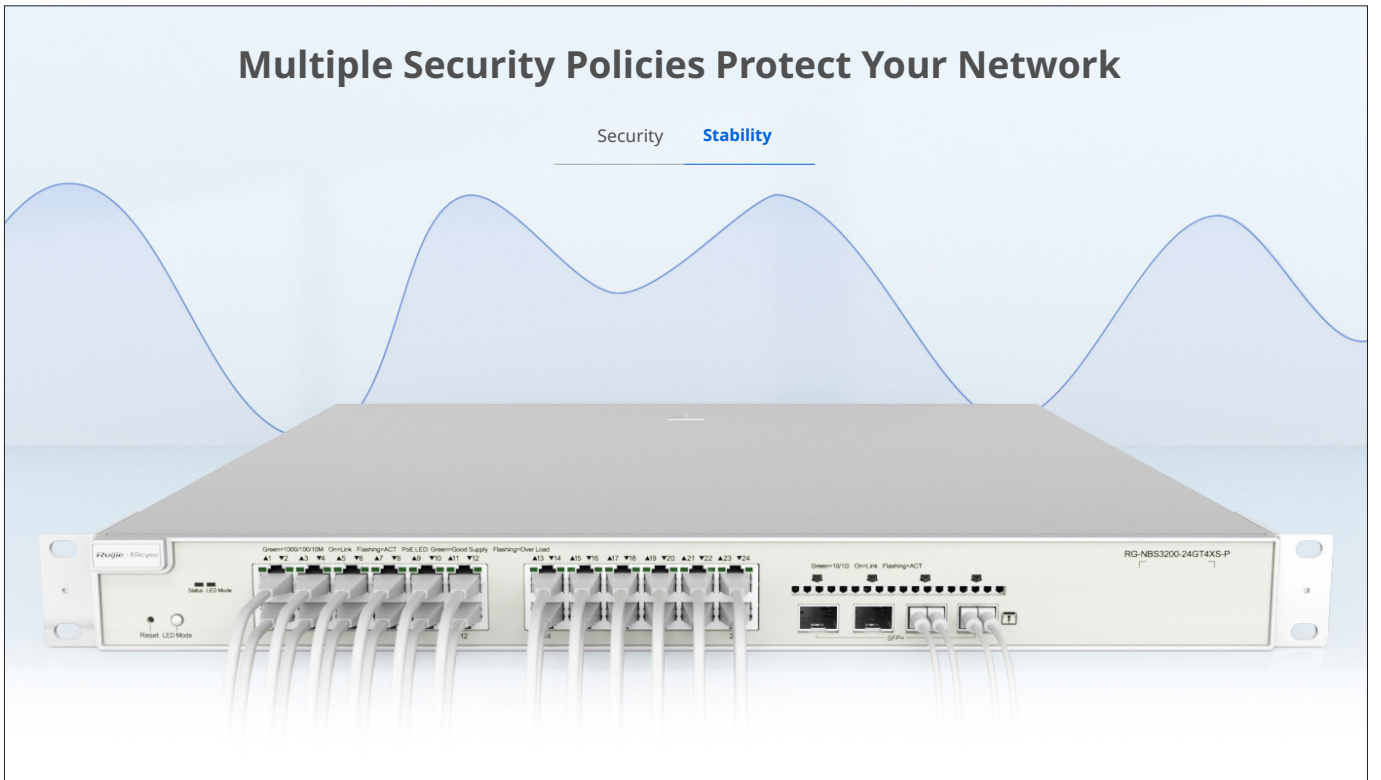
## Multiple Security Policies Protect Your Network

Security Stability



## Multiple Security Policies Protect Your Network

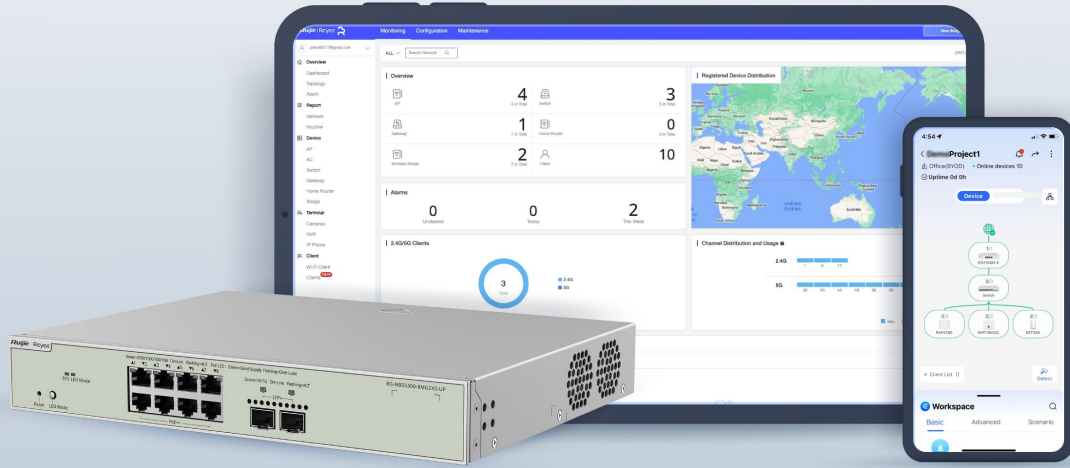
Security Stability



# 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



# Specifications

Specifications		RG-NBS5300-8MG2XS-UP
<b>Hardware Specifications</b>		
<b>Port</b>	Total Number of RJ45 Ports	8
	Total Number of Optical Ports	2
	Number of 10GE SFP+ ports	2
	Number of 2.5GE RJ45 ports	8
<b>POE</b>	Number of PoE/PoE+ out ports	8
	Number of PoE/PoE+/PoE++ out ports	8
	PoE budget	370W
	PoE power pins	1 2- 7 8-, 3 6+ 4 5+
<b>System Specifications</b>	CPU	MAC chip with a built-in single-core CPU, 800MHz
	RAM	512MB
	Flash memory	256MB
	Recommended camera limit	200W H265:350 400W H265:170
	Forwarding rate	58.72Mpps
	Switching capacity	80Gbps
	Maximum number of VLANs	4094
	Maximum number of MAC address entries	16000
	Maximum number of ARP entries	2000
	Routing table capacity (main unit routing)	6000
	Maximum number of IPv4 static routes	500
	Routing table capacity (network routing)	128

Specifications		RG-NBS5300-8MG2XS-UP
	Maximum number of IPv6 static routes	128
	Maximum number of ACEs	In-1900 Out-0
	Number of VCS members	2
<b>Power</b>	Power input	Rated voltage range: 100-240V~ Maximum voltage range: 90-264V~ Frequency: 50/60Hz Rated current: 6A
	Maximum power consumption	450W
	Power output	Vout=54V(7.6A),P=409W
	Input power supply	Single fixed power supply
<b>FAN</b>	Fan	2
	Fan speed adjustment	Hardware-based adjustment
	Heat dissipation	1,539 BTU/hr(220V/50Hz)
	Acoustic noise	<40dB (when the device works normally)
<b>Button</b>	Reset button	Yes
<b>EMC</b>	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)
<b>Safety Compliance</b>	Safety compliance	IEC 62368-1
<b>Certification</b>	CE, FCC	CE;FCC
<b>Mounting</b>	Mounting	Rack installation
<b>Casing</b>	Casing	Metal
<b>Cable Hot-Swappable</b>	Hot swapping of cables	Supported by all ports
<b>Mean Time Between Failure (MTBF)</b>	MTBF	>400KH
<b>Warranty</b>	Warranty Card	5



Specifications		RG-NBS5300-8MG2XS-UP
EEE	EEE	Yes
Environment and Reliability	Operating temperature	0 to 50°C
	Storage temperature	-40 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	Air Discharge: 8kV Contact Discharge: 6kV
	Surge protection	Common Mode 6kV
	Surge protection	Common Mode 6kV Differential mode 6kV
Package Contents	Dimensions (W x D x H)	300mm x 233mm x 43.6mm
	Weight	2.5 kg
	Shipping weight	3.25Kg
	Rack-mount bracket	2
	Screw	M3 Screw*8
	User Manual	1
	Rubber pad	4
	Input power supply	Single fixed power supply
	Warranty Card	1
<b>L2</b>		
Jumbo Frame	Jumbo frame length (MTU)	9216 Bytes(Per-port MTU)
port	Port flow control	Yes
	PoE watchdog	Yes
	Port isolation	Yes
	EEE	Yes

Specifications		RG-NBS5300-8MG2XS-UP
	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
	Multicast storm control	Yes
	Unknown unicast storm control	Yes

L3

Specifications		RG-NBS5300-8MG2XS-UP
<b>ARP</b>	ARP	Yes
<b>IPv4</b>	IPv4 ping	Yes
	IPv4 static route	Yes
	IPv4 traceroute	Yes
<b>IPv6 Configuration</b>	IPv6 static route	Yes
	ICMPv6	Yes
	IPv6 ping	Yes
	IPv6 traceroute	Yes
<b>OSPF</b>	OSPFv2	Yes
	OSPFv3	Yes
<b>IGMP</b>	IGMP V1, V2, V3	Yes
<b>DNS</b>	DNS client	Yes
	DNSv6 client	Yes
<b>DHCP</b>	DHCP relay	Yes
	DHCP snooping	Yes
	DHCP server	Yes
	DHCP client	Yes
<b>HTTP v6</b>	HTTP Access by IPv6	Yes
<b>High Features</b>		
<b>ACL</b>	Standard ACL	Yes
	Extended MAC ACL	Yes
	Extended IP ACL	Yes
	IPv6 ACL	Yes
<b>QoS</b>	802.1p traffic classification	Yes
	DSCP-based traffic classification	Yes

Specifications		RG-NBS5300-8MG2XS-UP
	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
<b>Online Upgrade</b>	Online Upgrade	Yes
<b>RLOG</b>	RLOG	Yes
<b>Self-Organizing Network</b>	SON	Yes
<b>syslog</b>	System log	Yes
<b>Client Identification</b>	Client discovery	Yes
<b>ALARM</b>	Camera detection	Yes
	Loop alarm	Yes
	MAC address entries	Yes
	IP address pool conflicts	Yes
	Full ARP table	Yes
	PoE service failure	Yes
	PoE power overload	Yes
<b>Radius</b>	RADIUS	Yes
<b>802.1X</b>	802.1X authentication	Yes
	Port-based 802.1X authentication	Yes
	MAC-based 802.1X authentication	Yes
	Guest VLAN	Yes
<b>IP+MAC Port Binding</b>	IP-MAC-port binding	Yes

Specifications		RG-NBS5300-8MG2XS-UP
<b>Anti-ARP Spoofing</b>	ARP anti-spoofing	Yes
<b>IP Source Guard</b>	IP source guard	Yes
<b>CPU Protection Policy (CPP)</b>	CPU Protection Policy	Yes
<b>Management Features</b>		
<b>Web Management</b>	eWeb	Yes
<b>MACC</b>	Ruijie Cloud	Yes
<b>APP</b>	Ruijie Reyee App	Yes
<b>SNMP</b>	SNMPv1, v2c, and v3	Yes

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 **Redefine your easy network**

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