

RG-NBF5200M-8FS16GT4XS

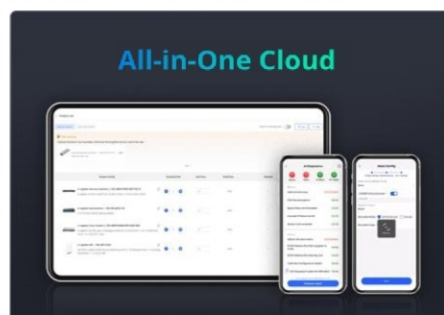
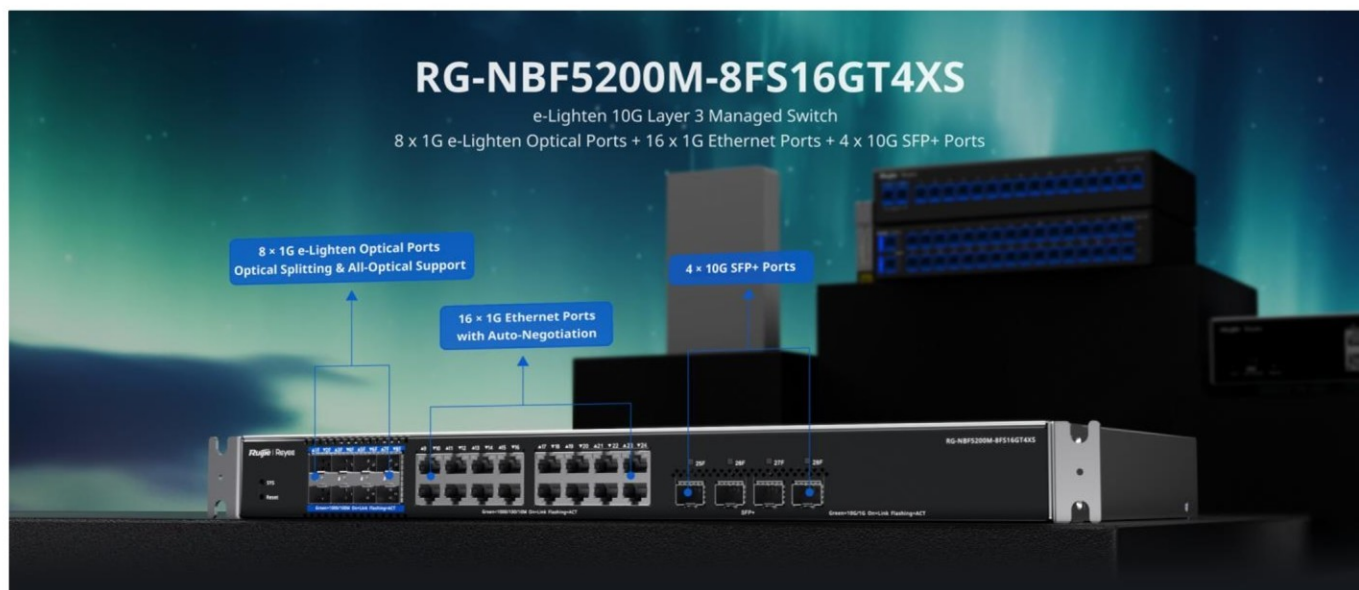
e-Lighten Layer 3 Managed Switch



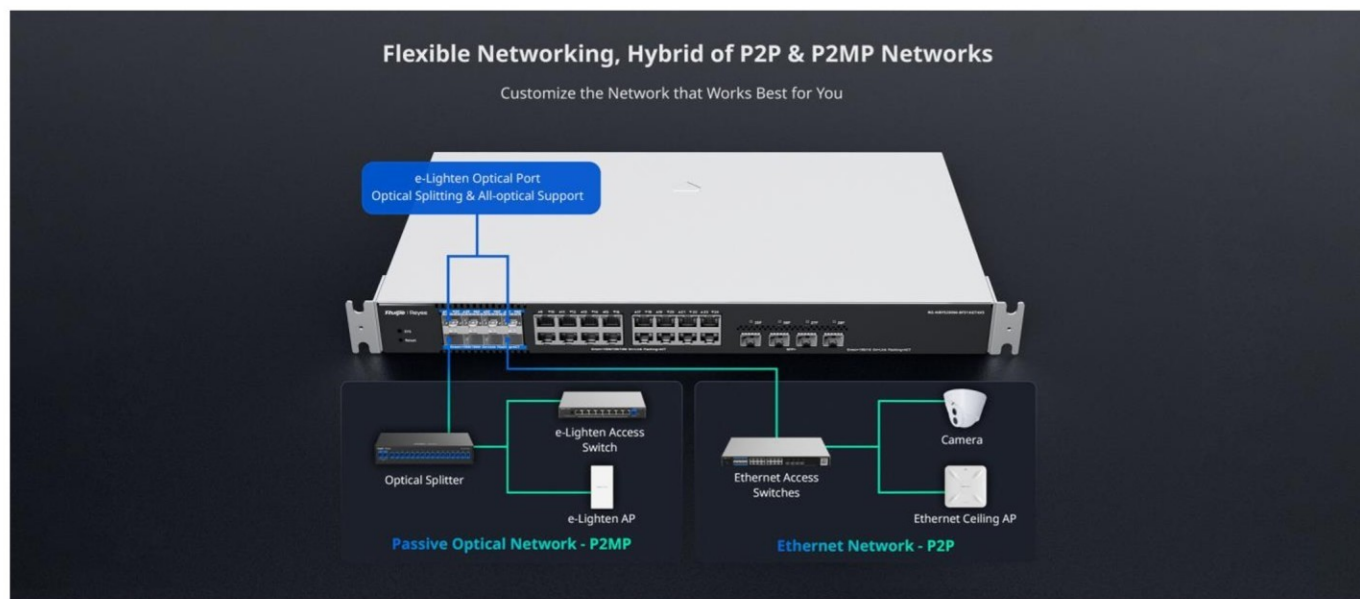
Highlights

- Passive Optical Networking Support
- Core Switch + OLT 2-in-1 for Flexible Networking
- 10G Uplink
- 6 kV Surge Protection, Reducing the Risk of Port Damage
- Free Layer 3 Cloud Management

Highlight Features



Highlight Features



Cloud, Make Your Business Easy

Pre-Sale Deployment Post-Sale

Easy BOM

Automated validation of the e-Lighten BOM for accuracy

Risk warning
1. Optical transceiver must be added. Otherwise, the e-Lighten Solution cannot be used.

Product name	Manufacturer	Quantity	Unit Price	Total Price	Remarks	Status
e-Lighten Access Switch (10G/40G/100G)	Huawei	1	1000	1000		Success
e-Lighten Access Switch (10G/40G/100G)	Huawei	1	1000	1000		Success
e-Lighten Access Switch (10G/40G/100G)	Huawei	1	1000	1000		Success
e-Lighten AP (10G/40G/100G)	Huawei	1	1000	1000		Success

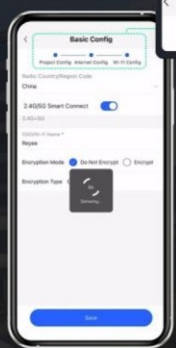
Highlight Features

Cloud, Make Your Business Easy

Pre-Sale Deployment Post-Sale

Easy Configuration

Unified configuration of optical networks, Ethernet and telephony systems



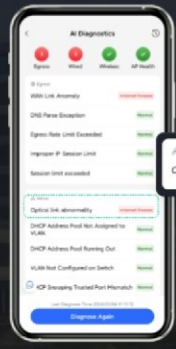
The image shows a smartphone displaying the 'Basic Config' interface. The interface has a progress bar at the top with four steps: Project Config, Internet Config, Wi-Fi Config, and a final step. The 'Project Config' step is currently active. Below the progress bar, there are fields for 'Project Name' and 'Project Code'. A toggle switch for 'E-40000 Smart Connect' is turned on. There are also fields for 'AP Name' and 'AP Password'. At the bottom, there is a 'Save' button.

Cloud, Make Your Business Easy

Pre-Sale Deployment Post-Sale

Easy Maintenance

One-click AI troubleshooting to remotely resolve 90% of faults



The image shows a smartphone displaying the 'AI Diagnostics' interface. At the top, there are four status indicators: 'System' (red), 'Network' (red), 'Wi-Fi' (green), and 'AP' (green). Below these, there is a list of diagnostic items with their status: 'WAN Link Anomaly' (red), 'DNS Name Resolution' (green), 'Egress Rate Limit Exceeded' (green), 'Ingress IP Session Limit' (green), 'Session Limit Exceeded' (green), 'Optical Link Abnormality' (red), 'DHCP Address Pool Not Assigned to VLAN' (green), 'DHCP Address Pool Running Out' (green), 'VLAN Not Configured on Switch' (green), and 'QoS Scheduling Trained Port Mismatch' (green). At the bottom, there is a 'Diagnose Again' button. A callout box on the right highlights the 'Optical link abnormality' item, showing a 'Fix it' button and a 'Internet Troubles' link.

/ Product Information

Model	RG-NBF5200M-8FS16GT4XS
Product Category	Layer 3

/ Hardware Specifications

Model	RG-NBF5200M-8FS16GT4XS
System Specifications	
Switching capacity	128 Gbps (Gbit/s)
Forwarding rate	95.232 Mpps
Environment and Reliability	
Surge protection	Service port: ±6 kV for common mode Power connector: ±6 kV for both common mode and differential mode
Temperature monitoring	No
Operating temperature	0°C to 50°C (32°F to 122°F)
Mounting options	Rack
Hot swapping of power modules	No
Altitude	0 m to 5000 m (0 ft. to 16,404.2 ft.)
Power supply monitoring	Module monitoring: No Fault alarm: No Intelligent power-on: No
Cooling	Air cooling, front-to-rear airflow + left-to-rear airflow

Hardware Specifications

Model	RG-NBF5200M-8FS16GT4XS
Fan	2 x fixed fans
MTBF	400,000 hours
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)
IP rating	IP20
Dimensions and Weight	
Product dimensions (W x D x H)	440 mm x 260 mm x 43.6 mm (17.32 in. x 10.24 in. x 1.72 in.)
Casing	Iron
Weight	3.34 kg (7.36 lbs.)
Shipping weight	4.68 kg (10.32 lbs.) (with packaging materials)
Power Supply and Consumption	
Maximum power consumption	60 W
Power supply	Fixed power supply
Certification and Regulatory Compliance	
EMC	EN 55032 Class A
	EN 300386 Class A
	EN 55035
	EN 300386
	IEC 61000-4-2
	IEC 61000-4-3

Hardware Specifications

Model	RG-NBF5200M-8FS16GT4XS
	IEC 61000-4-4
	IEC 61000-4-5
	IEC 61000-4-6
	IEC 61000-4-11
	IEC 61000-3-2
	IEC 61000-3-3
RoHS	Yes
Safety compliance	IEC 62368-1
Product Information	
Product category	Fixed device
Applicable products	No
Port Specifications	
Module slots	No
Number of 10/100BASE-T ports	No
Number of 10/100/1000BASE-T ports	16
Number of 10/100/1000/2500BASE-T ports	No
Number of 100/1000/2.5G/5G/10GBASE-T ports	No
Number of 100M SC ports	No
Number of 1GE SC ports	No
Number of 10GE SFP+ ports	4

Hardware Specifications

Model	RG-NBF5200M-8FS16GT4XS
Number of 1GE combo ports	No
Number of 2.5GE SFP ports	No
Number of 10GE combo ports	No
Number of 25GE SFP ports	No
Number of 40GE SFP ports	No
Number of 100GE SFP ports	No
Total number of optical ports	12
Total number of RJ45 ports	16
MGMT port	No
Buttons	No
DIP switch	No
Maximum number of PON ports	8
Maximum number of PON ports per OLT	8
Reset button	1
LEDs	1 x system status LED 8 x SFP/PON port LEDs 16 x Ethernet port LEDs 4 x SFP+ port LEDs

Software Specifications

Model	RG-NBF5200M-8FS16GT4XS
Interface	
Number of Layer 3 interfaces	32
Maximum number of SVIs	32
Maximum number of Layer 3 aggregate interfaces	15
Cable test	Yes
EEE	Yes
Authentication	
802.1X authentication	Yes
RADIUS	Yes
Security	
Port isolation	Yes
ACL	Yes
IPv6 ACL	Yes
Extended MAC ACL	Yes
Extended IP ACL	Yes
Maximum number of ACEs	1900
Applying an inbound ACL to a Layer 2 interface	Yes
DHCP snooping	Yes
CPU Protection Policy	Yes

Software Specifications

Model	RG-NBF5200M-8FS16GT4XS
IP source guard	Yes
Unknown unicast storm control	Yes
Broadcast storm control	Yes
Multicast storm control	Yes
Standard ACL	Yes
OLT Features	
PON/Ethernet optical transceiver auto-sensing	Yes
1G PON optical transceiver	Yes
2.5G PON optical transceiver	No
10G PON optical transceiver	No
Maximum number of ONUs per 1G PON port	32
Maximum number of ONUs per 1G OLT	256
1G PON port	8
Accuracy of ranging between OLT and ONU	100 m (328.08 ft.)
Layer 2 isolation for ONUs connected to the same OLT port (disabled by default)	Yes

Software Specifications

Model	RG-NBF5200M-8FS16GT4XS
Maximum registration distance for registered ONUs (default: 5 km, maximum: 10 km)	Yes
Static Bandwidth Allocation (SBA): fixed bandwidth for ONUs	Yes
Dynamic Bandwidth Allocation (DBA): maximum bandwidth for ONUs	Yes
Displaying OLT optical transceiver information on OLT (temperature/voltage/current/Tx power and Rx power/operating status/port mode)	Yes
Displaying ONU optical transceiver information on OLT (temperature/voltage/current/Tx power and Rx power/operating status/port mode)	Yes
ONU optical transceiver exception reporting (abnormal temperature, voltage, current, and Tx/Rx power)	Yes

Software Specifications

Model	RG-NBF5200M-8FS16GT4XS
OLT automatically connecting to ONUs	Yes
Type B single-homing link protection	Yes
Network Management and Monitoring	
Port mirroring	Yes
NTP client	Yes
eWeb management	Yes
Mirroring	Yes
Link aggregation mirroring	Yes
Zero configuration	Yes
SNMP	Yes
Ruijie Cloud management	Yes
Syslog	Yes
Upgrading device software version through Ruijie Reyee App	Yes
Restarting devices through Ruijie Reyee App	Yes
HTTP login	Yes
HTTPS login	Yes
Resolution of management port IP address conflicts	No

Software Specifications

Model	RG-NBF5200M-8FS16GT4XS
Ethernet Switching	
VLAN	Yes
Maximum number of VLANs	4094
Link aggregation	Yes
Interface flow control	Yes
Number of static MAC addresses	256
Maximum number of MAC address entries	16000
Static MAC address	Yes
Number of filtered MAC addresses	256
VLAN configuration supported on LAN ports	Yes
Voice VLAN	Yes
Inbound or outbound rate limiting based on interface traffic	Yes
STP (IEEE 802.1d)	Yes
RSTP (IEEE 802.1w)	Yes
LLDP	Yes
IP Routing	
RIPng	Yes
RIP	Yes

Software Specifications

Model	RG-NBF5200M-8FS16GT4XS
OSPFv2	Yes
OSPFv3	Yes
IPv4 static route	Yes
IPv6 static route	Yes
IP Routing	Yes
WLAN	
AP management	Yes
Maximum number of devices on the SON	300
Multicast	
IGMP	Yes
IGMP snooping	Yes
IGMP filtering	Yes
IGMP fast leave	Yes
PIM-DM	No
PIM-SM	Yes
Gateway Features	
QoS	Yes
Priority re-marking	Yes
Queue scheduling	Yes
Basic Configurations	

Software Specifications

Model	RG-NBF5200M-8FS16GT4XS
eWeb login with the username and password	Yes
Local upgrade	Yes
Online upgrade	Yes
Restoring factory defaults	Yes
Reliability	
Stacking	Yes (via VCS, without dedicated stacking port)
VCS	Yes
Ruijie Rapid Link Detection Protocol	Yes
System Performance Capacity	
Recommended number of concurrent clients	12000
Recommended camera limit	200 W H265: 400
	400 W H265: 200
	800 W H265: 100
IP Service	
DHCP server	Yes
DHCP client	Yes
DHCP relay	Yes
Option 138	Yes
Option 43	Yes

Software Specifications

Model	RG-NBF5200M-8FS16GT4XS
DNS client	Yes
Layer 2 multicast (IPv4)	Yes
Layer 3 multicast	Yes
Maximum number of ARP entries	1000
ARP binding	Yes
Secondary IP address	Yes
ND	Yes
ICMPv6	Yes
IPv6	Yes
IPv4 ping	Yes
IPv6 ping	Yes
IPv4 traceroute	Yes
IPv6 traceroute	Yes

Package Contents

Model	RG-NBF5200M-8FS16GT4XS
Accessories	
Mounting bracket	No
Rack-mount bracket	2
Screw	8 M4 x 8 mm cross recessed countersunk head screws
Manual	
User Manual	1
Warranty Card	1
Device	
Device	1

Ruijie | ReYee

 Redefine your easy network



Ruijie Networks Co., Ltd.

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