

# RG-NBF6002M

## e-Lighten Layer 3 Managed Modular Switch

DATASHEET

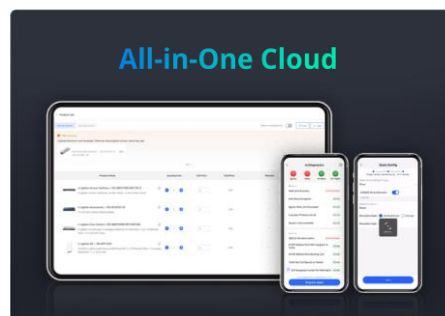
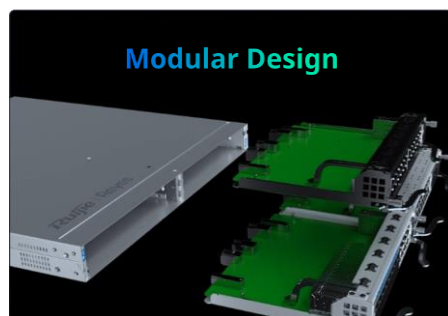
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### Highlights

- Passive Optical Networking Support
- Core Switch + OLT 2-in-1 for Flexible Networking
- Dual-Slot Design for Flexible Expansion
- Supports Up to 320 e-Lighten APs/Access Switches
- 10G Uplink
- Free Layer 3 Cloud Management

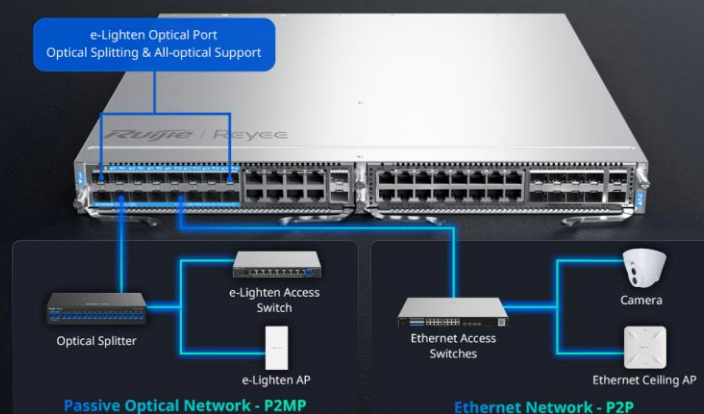
## Highlight Features



## Highlight Features

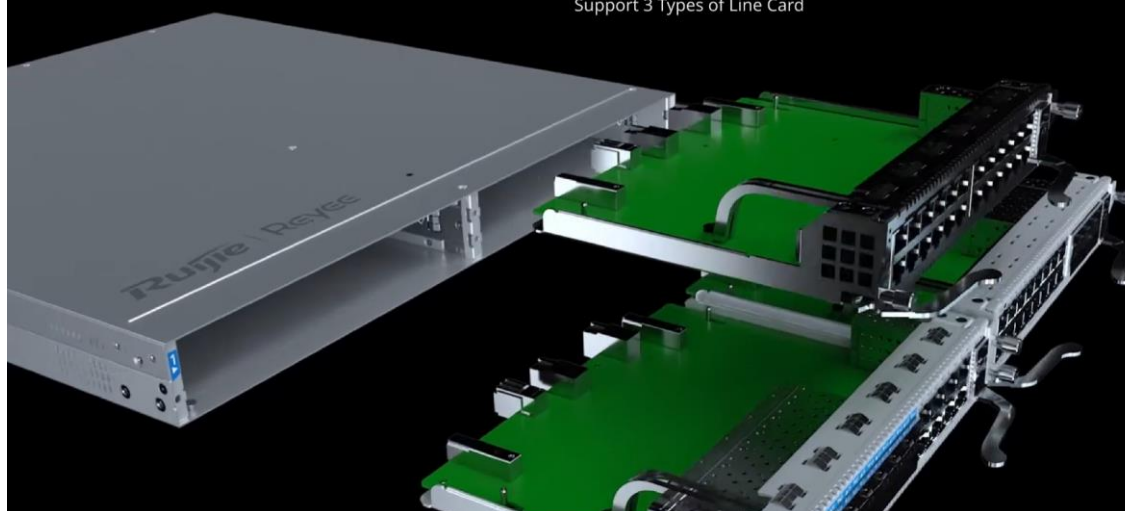
### Flexible Networking, Hybrid of P2P & P2MP Networks

Customize the Network that Works Best for You



### Modular Design: High Performance, Scalability, and Flexibility

Support 3 Types of Line Card



### High-Level Redundancy, Service Always On

2 Power Slots: Ensuring Service Continuity



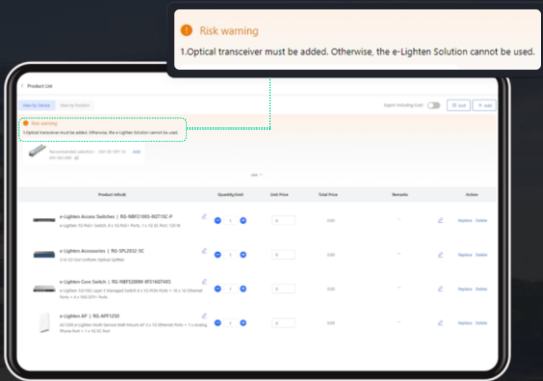
# Highlight Features

## 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.

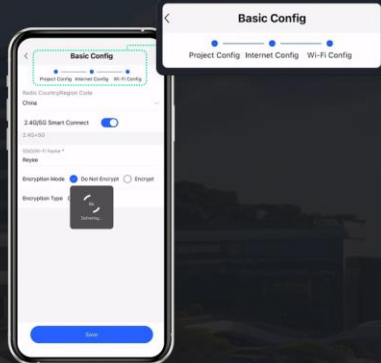
Product Name	Quantity	Unit Price	Total Price	Remarks	Action
e-Lighten Access Switch (10G SFP+ 24 Port 10G SFP+)	1	\$ 100	\$ 100		Details Delete
e-Lighten Access Switch (10G SFP+ 24 Port 10G SFP+)	1	\$ 100	\$ 100		Details Delete
e-Lighten Core Switch (10G SFP+ 24 Port 10G SFP+)	1	\$ 100	\$ 100		Details Delete
e-Lighten Core Switch (10G SFP+ 24 Port 10G SFP+)	1	\$ 100	\$ 100		Details Delete
e-Lighten AP (10G SFP+)	1	\$ 100	\$ 100		Details Delete

## Cloud, Make Your Business Easy

Pre-Sale    Deployment    Post-Sale

### Easy Configuration

Unified configuration of optical networks, Ethernet and telephony systems



**Basic Config**  
Project Config    Internet Config    Wi-Fi Config

Project Config: Internet Config: Wi-Fi Config

2.4GHz Smart Connect: ☒ On

Encryption Mode: ☒ On/Off Encryption ☐ Encryption

Encryption Type: ☒ WPA2-PSK ☐ WPA3-PSK

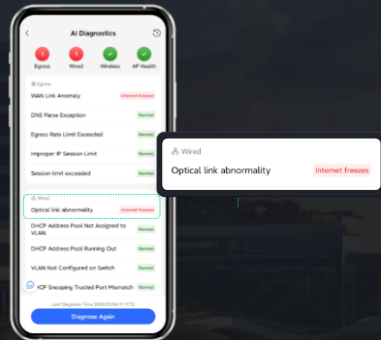
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## Cloud, Make Your Business Easy

Pre-Sale    Deployment    Post-Sale

### Easy Maintenance

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



**AI Diagnostics**

Wired: ☒ OK    Wireless: ☒ OK    AP: ☒ OK

Wired Link Abnormality: ☒ Internet Frezes

DNS Server Exception: ☒ Normal

Egress Rate Limit Exceeded: ☒ Normal

Improper IP Session Limit: ☒ Normal

Session Limit exceeded: ☒ Normal

Optical link abnormality: ☒ Internet Frezes

DHCP Address Pool Not Assigned to VLAN: ☒ Normal

DHCP Address Pool Running Out: ☒ Normal

VLAN Not Configured on Switch: ☒ Normal

QoS Dropping Trusted Port Mismatch: ☒ Normal

Engine Again

**Wired**  
Optical link abnormality    Internet Frezes

# Specifications

Model	RG-NBF6002M
Basic	
Line Card	NO
Chassis	Yes
Number of Line Card Slots	2
Number of Management Ports	1 x 10/100/1000BASE-T MGMT port
Recommended Client Limits	1200
Recommended Camera Limits	200W H265:800 400W H265:400 800W H265:200
PoE Support	NO
Switching Capacity	216Gbps
Forwarding Rate	132Mpps
Port Surge Protection	Common 6 kV
Operating Temperature	0°C to 50°C (32°F to 122°F)
Operating Humidity	10% to 90% RH
Mounting	Rack-mount
Hardware Specifications	
Number of Fans	3
PON/Ethernet Optical Transceiver Auto-Sensing	Yes
1G PON Optical Transceivers	Yes
2.5G PON Optical Transceivers	NO
10G PON Optical Transceivers	NO
Number of ONUs per 1G PON Port	32

Model	RG-NBF6002M
Number of ONUs of All 1G PON Ports per Device	320
Maximum Number of PON Ports Supported at Device Level	16
Layer 2 Isolation for ONUs Connected to the Same OLT Port (disabled by default)	Yes
Static Bandwidth Allocation (SBA): Fixed Bandwidth for ONUs	Yes
Dynamic Bandwidth Allocation (DBA): Maximum Bandwidth for ONUs	Yes
OLT Displaying OLT Optical Transceiver Info (Temperature/Voltage/Current/Tx Power/Rx Power/Port Mode)	Yes
OLT Displaying ONU Optical Transceiver Info (Temperature/Voltage/Current/Tx Power/Rx Power/Port Mode)	Yes
ONU Optical Transceiver Exception Reporting on OLT (Abnormal Temperature, Voltage, Current, and Tx/Rx Power)	Yes
OLT Automatically Connecting ONUs	Yes
Software Features	
VLAN	Yes
Max. Number of VLANs	4094
Port Mirroring	Yes
Port Aggregation (Link Aggregation)	Yes
802.1X Authentication	Yes
RIP	Yes
ACL	Yes
Port Flow Control	Yes
Quality of Service (QoS)	NO

Model	RG-NBF6002M
Network Management Support	Yes
Virtual Cluster Switching (VCS)	Yes
Layer 3 Support	Yes
Voice VLAN	NO
Hardware-based CPU Protection Policy (CPP)	Yes
Network Foundation Protection Policy (NFPP)	NO
Ruijie Rapid Link Detection Protocol (RLDP)	Yes
IPv6	Yes
Management via Ruijie Reyee App	Yes
Management via Web Interface	Yes
Management via Ruijie Cloud	Yes

## Line Card & Service Module

<b>MF6000M-16FS8GT2XS</b>	16 x 1G PON/SFP Ports + 8 x 1G Ethernet Ports + 2 x 10G SFP+ Ports
<b>MF6000M-16GT8SFP2XS</b>	16 x 1G Ethernet Ports + 8 x 1G SFP Ports + 2 x 10G SFP+ Ports
<b>MF6000M-24GT2XS</b>	24 x 1G Ethernet Ports + 2 x 10G SFP+ Ports

**Ruijie | Rcycc**

 **R**edefine **y**our **e**asy **n**etwork

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