

# RG-NBF5200M-8FS16GT4XS

## e-Lighten Layer 3 Managed Switch

DATASHEET

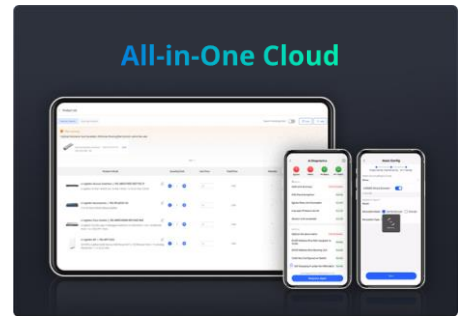
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### Highlights

- 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

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

Customize the Network that Works Best for You

The diagram illustrates a network switch with an e-Lighten Optical Port. This port is connected to two different network topologies:

- Passive Optical Network - P2MP:** This configuration includes an Optical Splitter, an e-Lighten Access Switch, and an e-Lighten AP.
- Ethernet Network - P2P:** This configuration includes Ethernet Access Switches, a Camera, and an Ethernet Ceiling AP.

### 10G Uplink: Powering the Next Generation of Connectivity

The image shows a network switch with a 10G SFP+ port. A blue fiber optic cable is plugged into the port. The text "10G" is prominently displayed in large blue letters in the foreground.

### Cloud, Make Your Business Easy

Pre-Sale      Deployment      Post-Sale

**Easy BOM**  
Automated validation of the e-Lighten BOM for accuracy

The screenshot shows a cloud management interface with a risk warning and a BOM table.

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

Product Name	Quantity	Unit Price	Total Price	Status	Action
e-Lighten Access Switch (1) [SKU: 10000000000000000000]	1	1000	1000	Ready	Remove
e-Lighten Access Switch (2) [SKU: 10000000000000000000]	1	1000	1000	Ready	Remove
e-Lighten Core Switch (1) [SKU: 10000000000000000000]	1	1000	1000	Ready	Remove
e-Lighten AP (1) [SKU: 10000000000000000000]	1	1000	1000	Ready	Remove

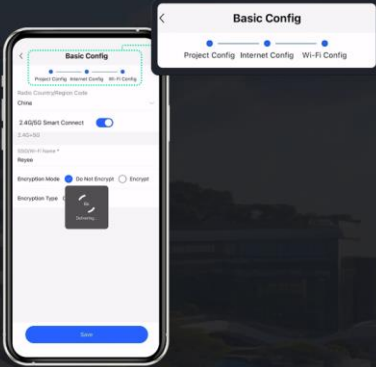
# Highlight Features

## Cloud, Make Your Business Easy

Pre-Sale      Deployment      Post-Sale

**Easy Configuration**

Unified configuration of optical networks, Ethernet and telephony systems



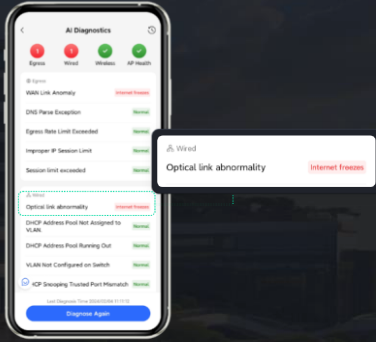
The image shows a smartphone displaying a configuration interface titled 'Basic Config'. The interface has a progress bar at the top with four steps: 'Project Config', 'Internet Config', 'Wi-Fi Config', and 'Basic Config', with the last step being active. Below the progress bar, there are several settings: 'i-ADSS Smart Connect' (toggle on), 'VLAN ID' (dropdown), 'VLAN Name' (dropdown), 'Encryption Mode' (radio buttons for 'Do Not Encrypt' and 'Encrypt'), and 'Encryption Type' (dropdown). A blue 'Save' button is at the bottom. A callout box above the phone shows a simplified version of the 'Basic Config' progress bar.

## 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 an 'AI Diagnostics' interface. At the top, there are four status indicators: 'Eyes' (red), 'Voice' (red), 'Wi-Fi' (green), and '4G Health' (green). Below this is a list of diagnostic items with status indicators: 'WAN Link Anomaly' (red), 'DNS Name Exception' (green), 'Egress Rate Limit Exceeded' (green), 'Improper IP Session Limit' (red), '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 'IGMP Snooping Trusted Port Mismatch' (green). A callout box on the right highlights the 'Optical link abnormality' item, showing a 'View' icon, the text 'Optical link abnormality', and a red 'Internet freezes' label.

# Specifications

Model	RG-NBF5200M-8FS16GT4XS
<b>Basic</b>	
Line Card	NO
Chassis	NO
Number of 1000BASE-T Ports	16
Number of 1G PON/SFP Ports	8
Number of 10G SFP+ Ports	4
Number of Management Ports	NO
Recommended Client Limits	1200
Recommended Camera Limits	2 MP H265:400 4 MP H265:200 8 MP H265:100
PoE Support	NO
Switching Capacity	216Gbps
Forwarding Rate	96Mpps
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
<b>Hardware Specifications</b>	
Number of Fans	2
PON/Ethernet Optical Transceiver Auto-Sensing	Yes
1G PON Optical Transceivers	Yes
2.5G PON Optical Transceivers	NO

Model	RG-NBF5200M-8FS16GT4XS
10G PON Optical Transceivers	NO
Number of ONUs per 1G PON Port	32
Number of ONUs of All 1G PON Ports per Device	256
Number of 1G PON Ports	8
Max. Number of PON Ports per Device	8
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
<b>Software Features</b>	
VLAN	Yes
Max. Number of VLANs	4094
Port Mirroring	Yes
Port Aggregation (Link Aggregation)	Yes
802.1X Authentication	Yes
RIP	Yes
ACL	Yes

<b>Model</b>	<b>RG-NBF5200M-8FS16GT4XS</b>
<b>Port Flow Control</b>	Yes
<b>Quality of Service (QoS)</b>	Yes
<b>Network Management Support</b>	Yes
<b>Virtual Cluster Switching (VCS)</b>	Yes
<b>Layer 3 Support</b>	Yes
<b>Voice VLAN</b>	Yes
<b>Hardware-based CPU Protection Policy (CPP)</b>	Yes
<b>Network Foundation Protection Policy (NFPP)</b>	NO
<b>Ruijie Rapid Link Detection Protocol (RLDP)</b>	Yes
<b>IPv6</b>	Yes
<b>Management via Ruijie Reeye App</b>	Yes
<b>Management via Web Interface</b>	Yes
<b>Management via Ruijie Cloud</b>	Yes

**Ruijie | RYCE**

 **Redefine your easy network**

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