



**Huawei GPON
(EG8147X6)
Troubleshooting Manual**

Provided by: NAYAtel Access



Huawei GPON (with internal router- Wi-Fi 6) Model – EG8147X6

Huawei EG8147X6 is an Optical Network Terminal (ONT) that operates on GPON technology. This device features

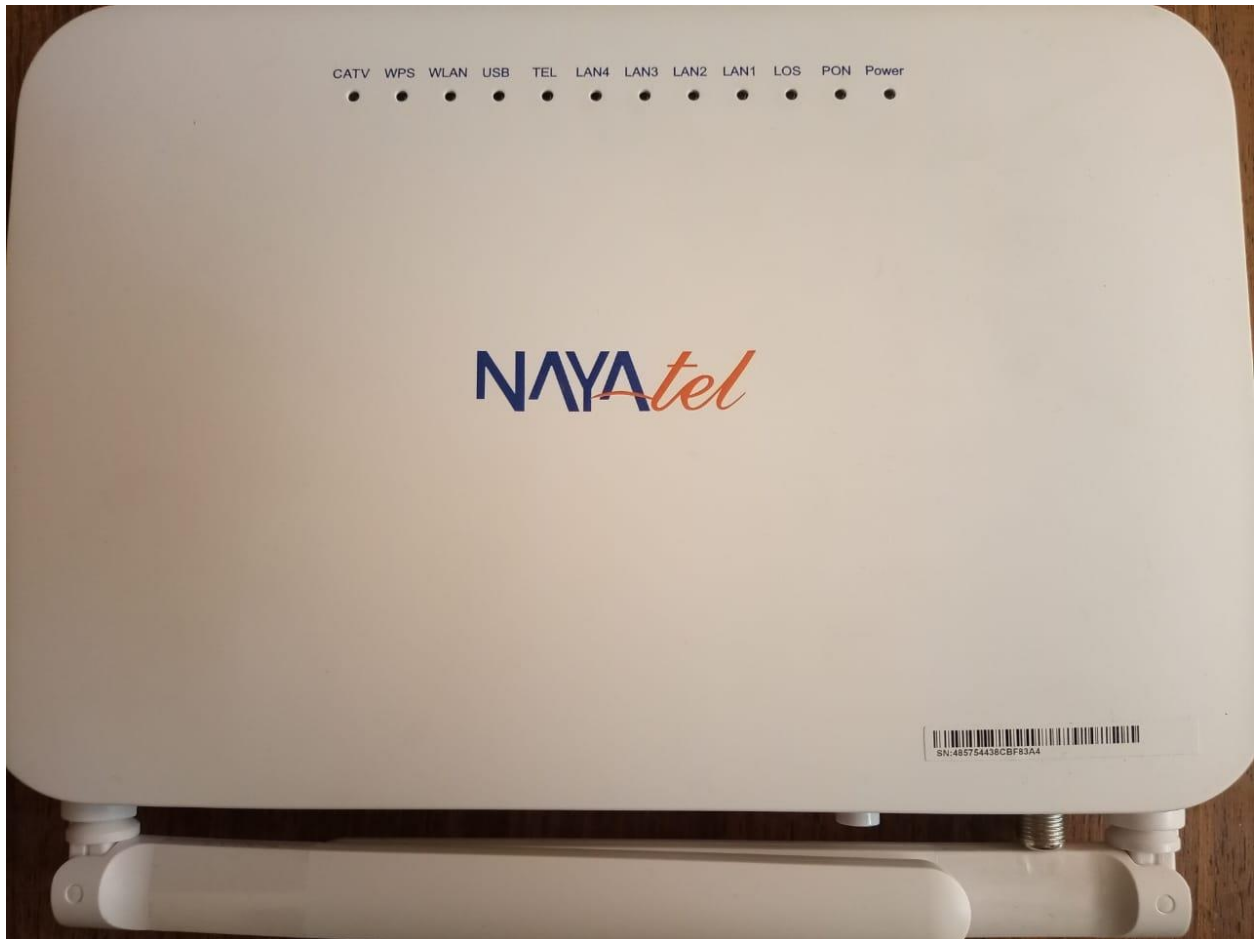
- 4-Gigabit Ethernet Ports
- 1-POTS Port
- 1-RF Video Port
- 1-USB Port
- 2.4G and 5G Wi-Fi 6 connectivity





Back side ports' sequence on Huawei GPON (EG8147X6) ONT

TEL Port	Telephone Port
LAN 1 - LAN 4	Gigabit Ethernet Ports
USB	USB Port
Power	Input Power Port
ON/OFF	Power ON/OFF Button
CATV	RF TV-Port



Light	Status	Indication
Power	Always On	The device is powered on
	Off	Power supply is cut off
WLAN	Always On	WLAN function is enabled
	Blinks	Data is being transmitted on WLAN port
PON	Always On	In case of any other status, contact NAYAtel Support
LOS	Always Off	
LAN1-LAN4	Green Stable	Ethernet connection established
	Green Blinking	Data getting transmitted
TEL	Off	Telephone number not configured
	Green Stable	Number configured
	Green Blinking	Call in progress

Configuring Wi-Fi on ONT device

Connect your computer, phone or laptop to any LAN port on your ONT device using an Ethernet cable or to Wi-Fi network of Huawei ONT. Access ONT web interface by entering the following IP address on browser.

192.168.18.1

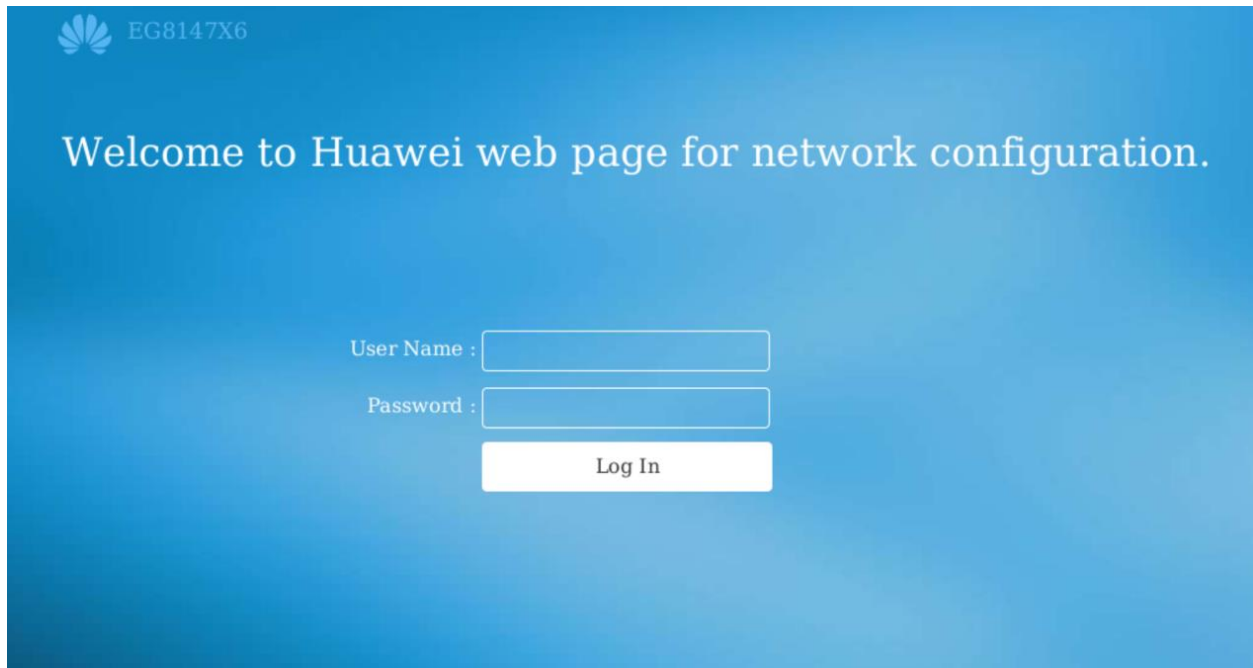
Login into ONT by entering the following credentials

Username: Epuser

Password: userEp

OR

You can enter the password written on the back of device.



EG8147X6

Welcome to Huawei web page for network configuration.

User Name :

Password :

Log In

Step 1

Go to Advanced>WLAN>WLAN 2.4G Basic Network Settings and set the SSID (Network name). Enable the SSID by checking the box. Similarly set the SSID for 5G network as well.

EG8147X6 Fast Setting | nayateladmin Logout

Network connection status: **normal**

- Home Page
- One-Click Diagnosis
- System Information
- Advanced

The diagram shows a blue router with a green globe icon labeled 'Internet' connected to its top-left port. A blue Wi-Fi signal icon labeled 'Wi-Fi configuration' is connected to the top-right antenna. A USB port and a red 'RESET' button are visible on the front panel. Below the router, there are two green Wi-Fi signal icons and one blue Wi-Fi signal icon, representing connected devices.

EG8147X6 Fast Setting | nayateladmin Logout

- WAN
- LAN
- Security
- Route
- Forward Rules
- Application
- WLAN
- 2.4G Basic Network...
- 2.4G Advanced Netw...
- 5G Basic Network S...
- 5G Advanced Networ...

2.4G Basic Network Settings

On this page, you can set the basic parameters of 2.4 GHz wireless network (When the 2.4 GHz wireless network is disabled, this page is blank).

Caution:
 1. Wireless network services may be interrupted temporarily after you modify wireless network parameters.
 2. It is recommended that you use the WPA2 or WPA/WPA2 authentication mode for security purposes.

Enable WLAN

SSID Index	SSID Name	SSID Status	Number of Associated Devices	Broadcast SSID	Security Configuration
1	Tx-Complaints	Enabled	64	Enabled	Configured

SSID Configuration Details

SSID Name: * (1-32 characters)

Enable SSID:

Number of Associated Devices: *(1-64)

WAN

LAN

Security

Route

Forward Rules

Application

WLAN

2.4G Basic Network...

2.4G Advanced Netw...

5G Basic Network S...

5G Advanced Networ...

2.4G Basic Network Settings

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Enable WLAN

New Delete

SSID Index	SSID Name	SSID Status	Number of Associated Devices	Broadcast SSID	Security Configuration
1	Tx-Complaints	Enabled	64	Enabled	Configured

SSID Configuration Details

SSID Name: * (1-32 characters)

Enable SSID:

Number of Associated Devices: *(1-64)

Step 2:

Set the Authentication mode to WPA/WPA2 PreSharedKey and Encryption mode to AES. Set the Wi-Fi security key (WPA PreSharedKey). Password should be 8 to 63 characters. Repeat the same process for 5G network settings.

Application	SSID Index	SSID Name	SSID Status	Number of Associated Devices	Broadcast SSID	Security Configuration
WLAN	1	Tx-Complaints	Enabled	64	Enabled	Configured

2.4G Basic Network...

2.4G Advanced Netw...

5G Basic Network S...

5G Advanced Networ...

Automatic Wi-Fi Sh...

Wi-Fi Coverage

Voice

System Management

Maintenance Diagno

SSID Configuration Details

SSID Name: * (1-32 characters)

Enable SSID:

Number of Associated Devices: *(1-64)

Broadcast SSID:

Enable WMM:

Authentication Mode:

Encryption Mode: (TKIP&AES mode is recommended)

WPA PreSharedKey: Hide *(8-63 characters or 64 hexadecimal characters)

WPA Group Key Regeneration Interval: *(600-86400s)

New Delete

Application	SSID Index	SSID Name	SSID Status	Number of Associated Devices	Broadcast SSID	Security Configuration
WLAN	5	Tx-Complaints-5GHz	Enabled	64	Enabled	Configured

2.4G Basic Network...

2.4G Advanced Netw...

5G Basic Network S...

5G Advanced Networ...

Automatic Wi-Fi Sh...

Wi-Fi Coverage

Voice

System Management

Maintenance Diagno

SSID Configuration Details

SSID Name: * (1-32 characters)

Enable SSID:

Number of Associated Devices: *(1-64)

Broadcast SSID:

Enable WMM:

Authentication Mode:

Encryption Mode: (TKIP&AES mode is recommended)

WPA PreSharedKey: Hide *(8-63 characters or 64 hexadecimal characters)

WPA Group Key Regeneration Interval: *(600-86400s)

Step 3:

After setting SSID (network name) and password, click on apply button at the end of setting to apply and save the changes.

The screenshot shows a network configuration interface with a sidebar on the left and a main settings area on the right. The sidebar includes options like '5G Basic Network S...', '5G Advanced Networ...', 'Automatic Wi-Fi Sh...', 'Wi-Fi Coverage', 'Voice', 'System Management', and 'Maintenance Diagno'. The main settings area includes:

- Enable SSID:
- Number of Associated Devices: *(1-64)
- Broadcast SSID:
- Enable WMM:
- Authentication Mode:
- Encryption Mode: (TKIP&AES mode is recommended)
- WPA PreSharedKey: Hide *(8-63 characters or 64 hexadecimal characters)
- WPA Group Key Regeneration Interval: *(600-86400s)
- Enable WPS:
- WPS Mode:
- PBC:

At the bottom, there are two buttons: 'Apply' (highlighted with a red box) and 'Cancel'.

Step 4:

Go to 2.4G Advanced Network Settings. Change the regulatory domain to “Pakistan”, channel to “Automatic” setting and channel width to “20MHz”. Click on apply button to save the changes.

- WAN
- LAN
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 - 2.4G Advanced Netw...
 - 5G Basic Network S...
 - 5G Advanced Networ...

2.4G Advanced Network Settings

On this page, you can set the advanced parameters of 2.4 GHz wireless network (When the 2.4 GHz wireless network is disabled, this page is blank).
Caution: Wireless network services may be interrupted temporarily after you modify wireless network parameters.

Advanced Configuration

TX Power: 100%

Regulatory Domain: Pakistan

Channel: Automatic

Channel Width: 20 MHz

Mode: 802.11b/g/n/ax

(If the Wi-Fi cannot be found or connected when 802.11 ax/Wi-Fi 6 is enabled, upgrade the wireless network adapter driver of the PC to the latest version.)

DTIM Period: 1 (1-255; default: 1)

Beacon Period: 100 (20-1000 ms; default: 100)

RTS Threshold: 2346 (1-2346 bytes; default: 2346)

- Forward Rules
- Application
- WLAN
 - 2.4G Basic Network...
 - 2.4G Advanced Netw...
 - 5G Basic Network S...
 - 5G Advanced Networ...
 - Automatic Wi-Fi Sh...
 - Wi-Fi Coverage
 - Voice

TX Power: 100%

Regulatory Domain: Pakistan

Channel: Automatic

Channel Width: 20 MHz

Mode: 802.11b/g/n/ax

(If the Wi-Fi cannot be found or connected when 802.11 ax/Wi-Fi 6 is enabled, upgrade the wireless network adapter driver of the PC to the latest version.)

DTIM Period: 1 (1-255; default: 1)

Beacon Period: 100 (20-1000 ms; default: 100)

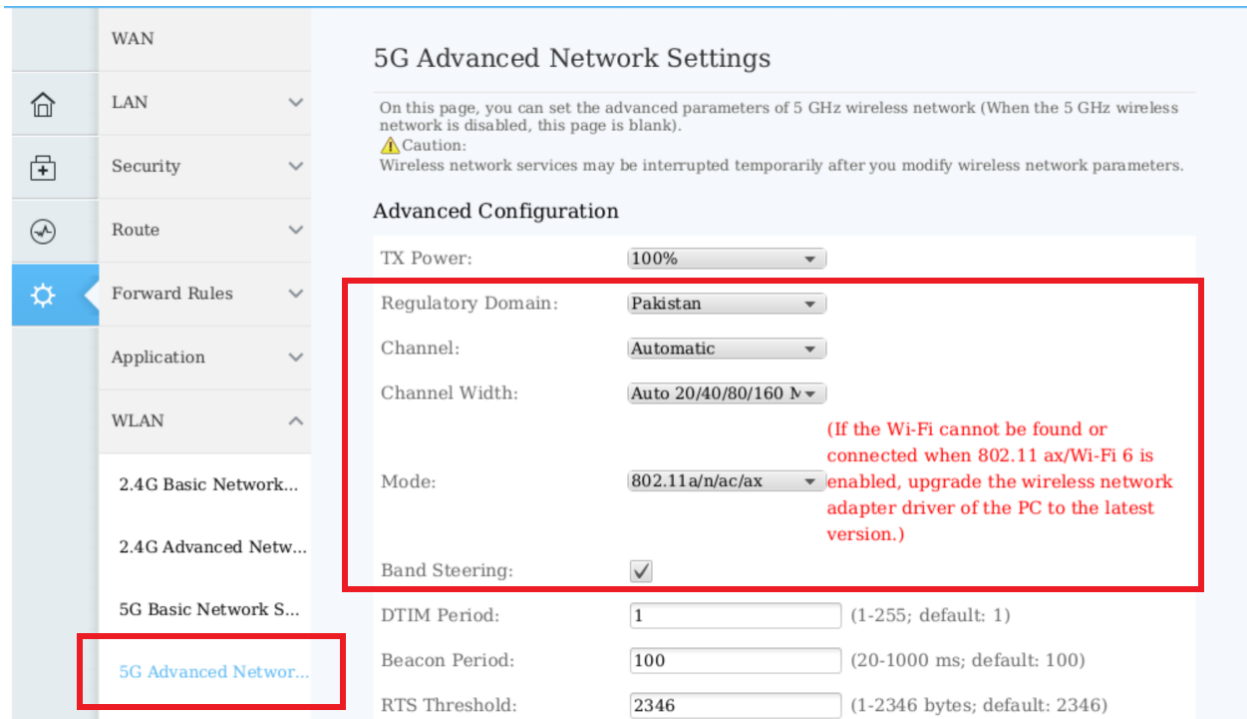
RTS Threshold: 2346 (1-2346 bytes; default: 2346)

Fragmentation Threshold: 2346 (256-2346 bytes; default: 2346)

Apply Cancel

Step 5:

Go to 5G Advanced Network Settings. Change the regulatory domain to “Pakistan”, channel to “Automatic” setting and channel width to “Auto 20/40/80/160MHz”. Check the band steering option. Click on apply button to save the changes.



5G Advanced Network Settings

On this page, you can set the advanced parameters of 5 GHz wireless network (When the 5 GHz wireless network is disabled, this page is blank).

Caution:
Wireless network services may be interrupted temporarily after you modify wireless network parameters.

Advanced Configuration

TX Power: 100%

Regulatory Domain: Pakistan

Channel: Automatic

Channel Width: Auto 20/40/80/160 MHz

Mode: 802.11a/n/ac/ax

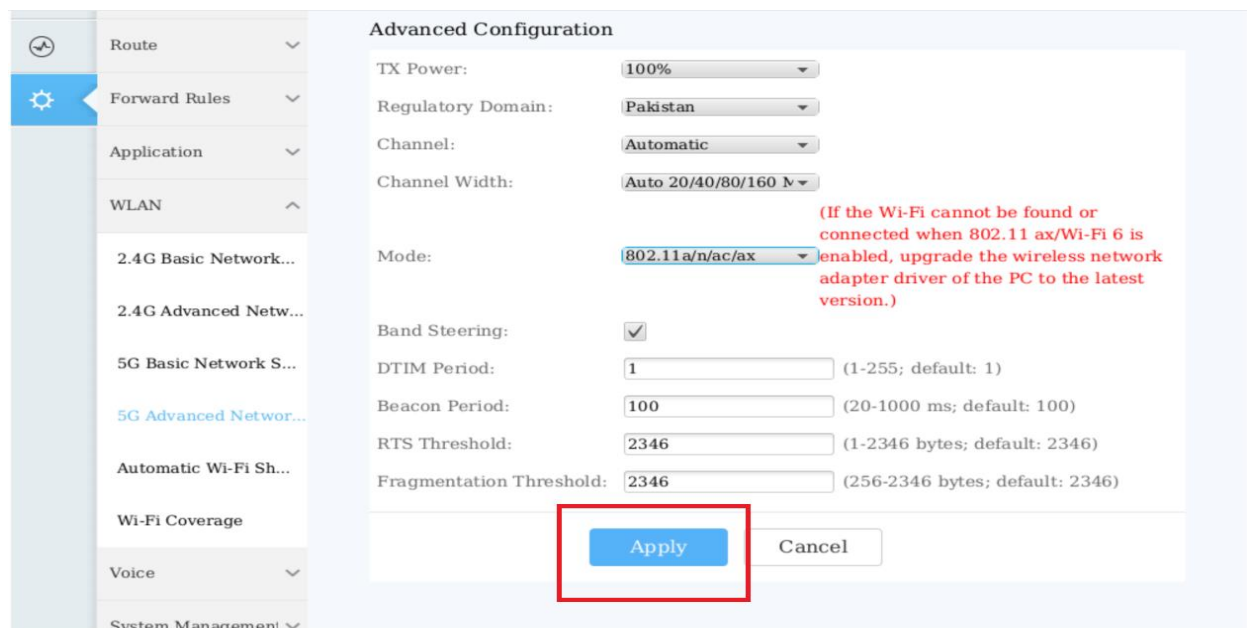
Band Steering:

DTIM Period: 1 (1-255; default: 1)

Beacon Period: 100 (20-1000 ms; default: 100)

RTS Threshold: 2346 (1-2346 bytes; default: 2346)

(If the Wi-Fi cannot be found or connected when 802.11 ax/Wi-Fi 6 is enabled, upgrade the wireless network adapter driver of the PC to the latest version.)



Advanced Configuration

TX Power: 100%

Regulatory Domain: Pakistan

Channel: Automatic

Channel Width: Auto 20/40/80/160 MHz

Mode: 802.11a/n/ac/ax

Band Steering:

DTIM Period: 1 (1-255; default: 1)

Beacon Period: 100 (20-1000 ms; default: 100)

RTS Threshold: 2346 (1-2346 bytes; default: 2346)

Fragmentation Threshold: 2346 (256-2346 bytes; default: 2346)

Apply Cancel

(If the Wi-Fi cannot be found or connected when 802.11 ax/Wi-Fi 6 is enabled, upgrade the wireless network adapter driver of the PC to the latest version.)

Precautionary Measures

1. Never remove the power cable from the ONT as this can damage the ONT.
2. Only connect the ONT with the UPS provided by Nayatel as other UPS can damage the ONT.
3. Do not cover the ONT as this blocks the ventilation for the ONT circuitry.
4. Never reset the ONT by pressing the Reset button as this will remove all configurations of ONT.
5. Do not change the ONT location as it may damage the optical fiber cable. Please contact NAYAtel Support in this regard

ONT's unique Serial Number

Serial number of ONT is a unique number. No two ONTs can have same serial. Customer's User-ID can also be identified by this serial number. Serial number is pasted on front side of ONT.