Manuals+ — User Manuals Simplified.

Baudcom BD-ONU-311RT 1GE+CATV XPON ONU Modem User Manual

Contents

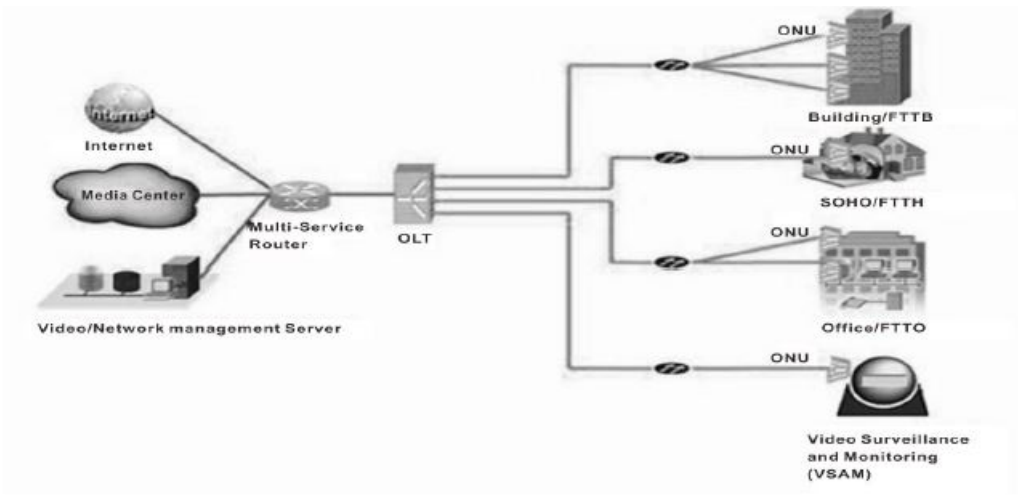# Baudcom BD-ONU-311RT 1GE+CATV XPON ONU Modem

Overview

Product Description
BD-ONU-311RT ONU is designed as HGU(Home Gateway Unit) in different FTTH solutions, The carrier-class FTTH application provides different services access, It is based on mature and stable, cost-effective XPON Technology. XPON ONU can switch automatically with EPON and GPON mode when it access to the EPON or GPON OLT. Adopts high reliability, easy management, configuration flexibility and good quality of service (QoS) guarantees to meet the technical performance of the EPON Standard of IEEE802.3ah ,CTC3.0, and GPON Standard of ITU-TG.984.X

Application Chart

Number	Type	Note
1	1GE+CATV	

Technical parameters

Technical item	1GE+CATV ONU
PON interface	1 E/GPON port(EPON PX20+ and GPON Class B+)

Wavelength	T×1310nm , R×1490nm
Optical interface	1 PON connector,SC/APC
LAN interface	1x 10/100/1000Mbps auto adaptive Ethernet interface. RJ45 connector
LED	PWR, LOS, PON, LAN, NORMAL, WARN
Push-Button	1,Reset 2,For Function of Power on/off.
Operation condition	Temperature:0°C 50°C Humidity:l0% – 90% (non-condensing)
Storing condition	Temperature:-20°C-60°C Humidity:1 0% – 90% (non-condensing)
Power supply	DC 12V/1A
Power consumption	<3W

Installation

Installation Requirements
To avoid equipment damage caused by improper use and personal injury, please observe the following precautions:

- Do not place the device near water or in damp places, in order to prevent water or moisture from entering the device.
- Do not put the device in an unstable place, avoid falling damage to equipment.
- Make sure that the supply voltage of the device matches the required voltage value.
- Do not open the equipment chassis without permission.
- Unplug before cleaning the power plug; prohibit the use of liquid cleaning. Installation Environment requirements

  ONU equipment must be installed in the interior, and to ensure the following conditions:
- Confirmation at the ONU installation at sufficient space to facilitate cooling machine.
- ONU suitable operating temperature of 0°C — 50°C, humidity 10% to 90%. Electromagnetic Environment ONU equipment in use can be affected by external electromagnetic interference, such as radiation and conduction through the impact on the device, this should note the following:
- Device workplace should avoid radio transmitters, radar stations, and high-frequency interface from power equipment.
- User cable typically require alignment indoors if outdoor lighting traces measures should. Equipment Installation

  ONU product is a fixed configuration cassette equipment. Site equipment installation is relatively simple. Simply install the device on a specified place, connecting the upstream fiber subscriber line connections, connect the power cable. Actual operation is as follows:

1. Installed on the desktop

   Place the machine on a clean bench, this installation is relatively simple, you can observe the following operation:

   - Ensure the smooth workbench.
   - Around the device enough space for heat dissipation.
   - Do not place objects on the device.

2. Mounted on the wall

   - Observation ONU equipment chassis two cruciform recess, in accordance with the position of the groove, instead two screws in the wall
   - The original selected two mounting screws gently snap into recesses aligned.
   - Slowly let go, so that the device under the support of the screw hanging on the wall.

Panel lights on

LED	Status	Description
PWR	ON	The device is powered up.
	Off	The device is powered down.
LOS	Blink	Device dose not receive optical signals.
	Off	Device has received optical signal.
PON	ON	The device has registered to the PON system.
	Off	The device registration is incorrect.
	Blink	The device is registering the PON system.
LINK/ACT	ON	Port is connected properly (LINK).
	Off	Port connection exception or not connected.
	Blink	Port is sending or/and receiving data (ACT).
Normal	On	Input optical power is between -18dBm and 2dBm
	Off	Input optical power is higher than 2dBm or lower than -18dBm
WORN	On	Input optical power is higher than 2dBm or lower than -18dBm
	Off	Input optical power is between -18dBm and 2dBm

Equipment List

Contents	Quantity
ONU	1pcs
Power Adapter	1pcs

	User Manual	1pcs	
	RJ45 Cable (Optional)	1pcs	

Web Management

GPON/EPON ONU provides simple Web management functions, including Device Information, modify LAN IP address, modify/add/delete wan connection, Firewall service Reboot/Restore, firmware upgrade etc…

Login webpage

1. Set your PC to an IP address within the following range: 192.168.1.X (2~254), and with the subnet mask of 255.255.255.0.
2. Launch an Internet browser from a computer or wireless device that is connected to the network.
3. Type http://192.168.1.1,A login window opens.You can find the preset IP address of device on the device label.
4. Enter the router user name and password.The user name is admin. The default password is admin. The user name and password are case-sensitive.You can find the preset username and password on the device label.

Figure 2 Web login

Device Menu displays the current device base information. Including Firmware Version, LAN IP Address, MAC address and WAN connection Status.
Note: Some of the device information may be changed by manufacturer.

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Some of the device information may be changed by manufacturer.

PON WAN Menu display the detail WAN connection configuration, including VLAN ID, Channel Mode and Connection Type.
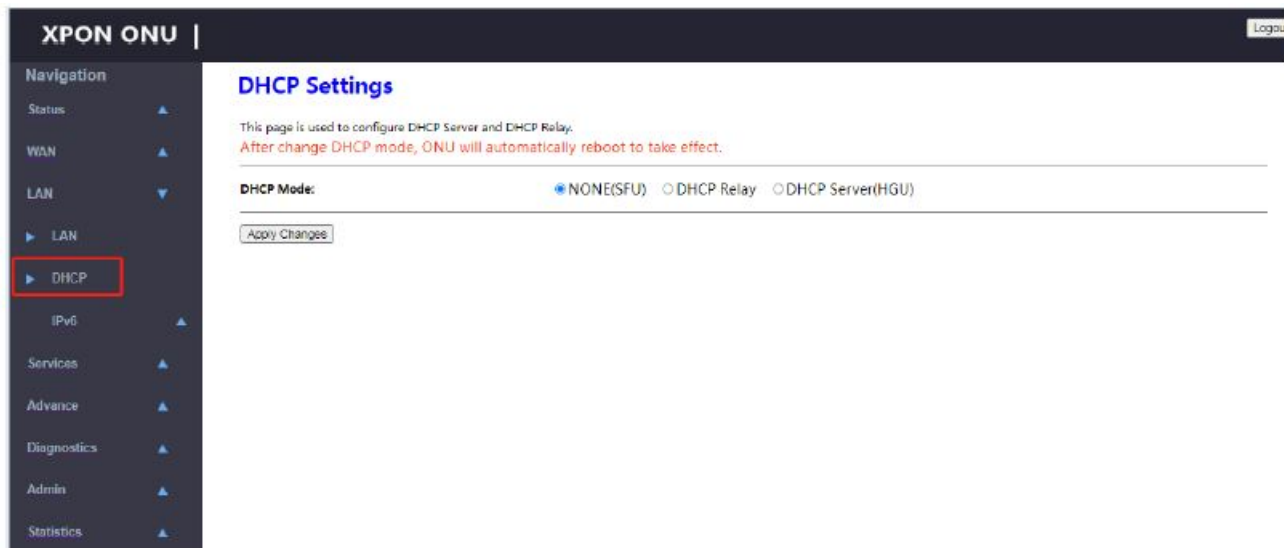
Note:

For this page, according to the local network, the customer can mark VLAN ID and choose the Bridge/IPoE/PPPoE for Internet. Modify WAN: If you want to modify the WAN connection, choose the corresponding the WAN connection. Create WAN: If you want to add a WAN connection, choose the "new link".Enable VLAN: If the WAN connection needs a VLAN, please enable VLAN and input the VLAN ID. Mark: The priority of VLAN, usually the server of ISP needs this parameter to make QoS.Channel Mode: Configuration bridge or route WAN connection.Bridged: need the

- PC/Router of LAN side to dial ,and need to bind the LAN port.
- IPoE: Your ISP assign your IP address.
- DHCP: Your ISP uses DHCP to assign your IP address automatically.
- Fixed IP:Enter the IP address, IP subnet mask, and the gateway IP address that your ISP assigned. The
- gateway is the ISP router to which your router connects.
- PPPoE:Select this type if you use DSL (Digital Subscriber Line) service and are provided with a username and password by the ISP.
- Enable NAPT: Network Address Translation. If you make a IPv4 WAN connection, please enable NAPT. Admin Status: Disable/enable this WAN connection.
- Channel Type: Select the service use for of the WAN connection.
- INTERNET: This WAN connection only use for Internet service.
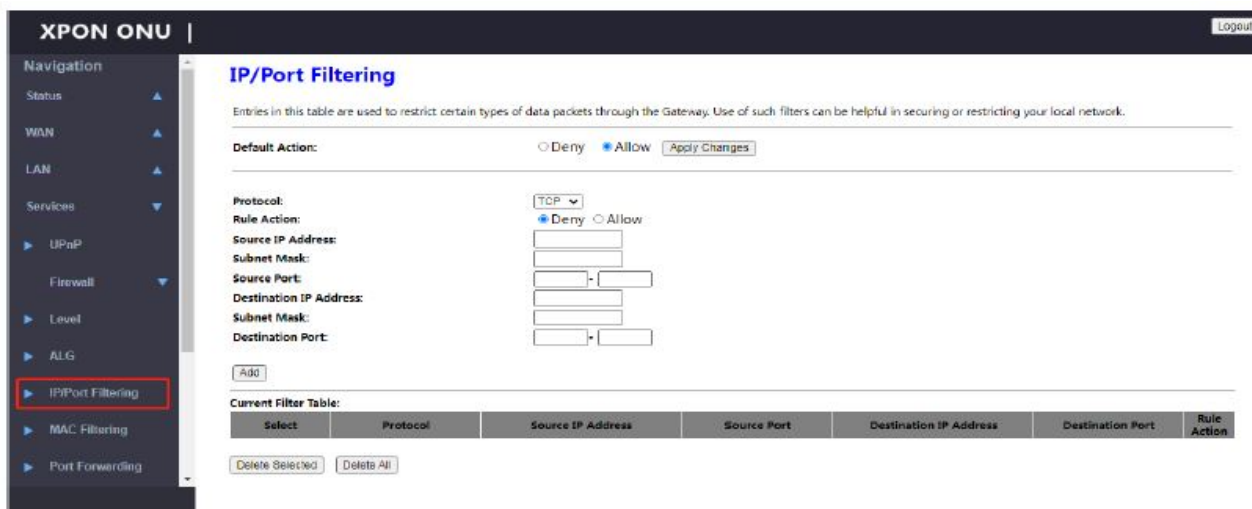- MTU: The Maximum Transmission Unit.

Note:

An incorrect MTU setting can cause Internet communication problems. For example, you might not be able to access some websites, not be able to play some apps or games.In this situations,try to changing the value of MTU to smaller,such as 1480/1460.Enable IGMP-Proxy: enable IPTV for this route WAN connection.(IPv4) Enable MLD-Proxy: enable IPTV for this route WAN connection.(IPv6) IP Protocol: You can select IPv4, IPv6 or IPv4 and IPv6 mode. Port Mapping: The port bind to the WAN connection, the data form the port will pass through the

corresponding the WAN connection.

LAN Menu display DHCP

1. NONE(SFU) Only works in bridge mode
2. DHCP Server(HGU) Routing patterns
3. According to the division of network address segment, customer can change the LAN DHCP server configuration.
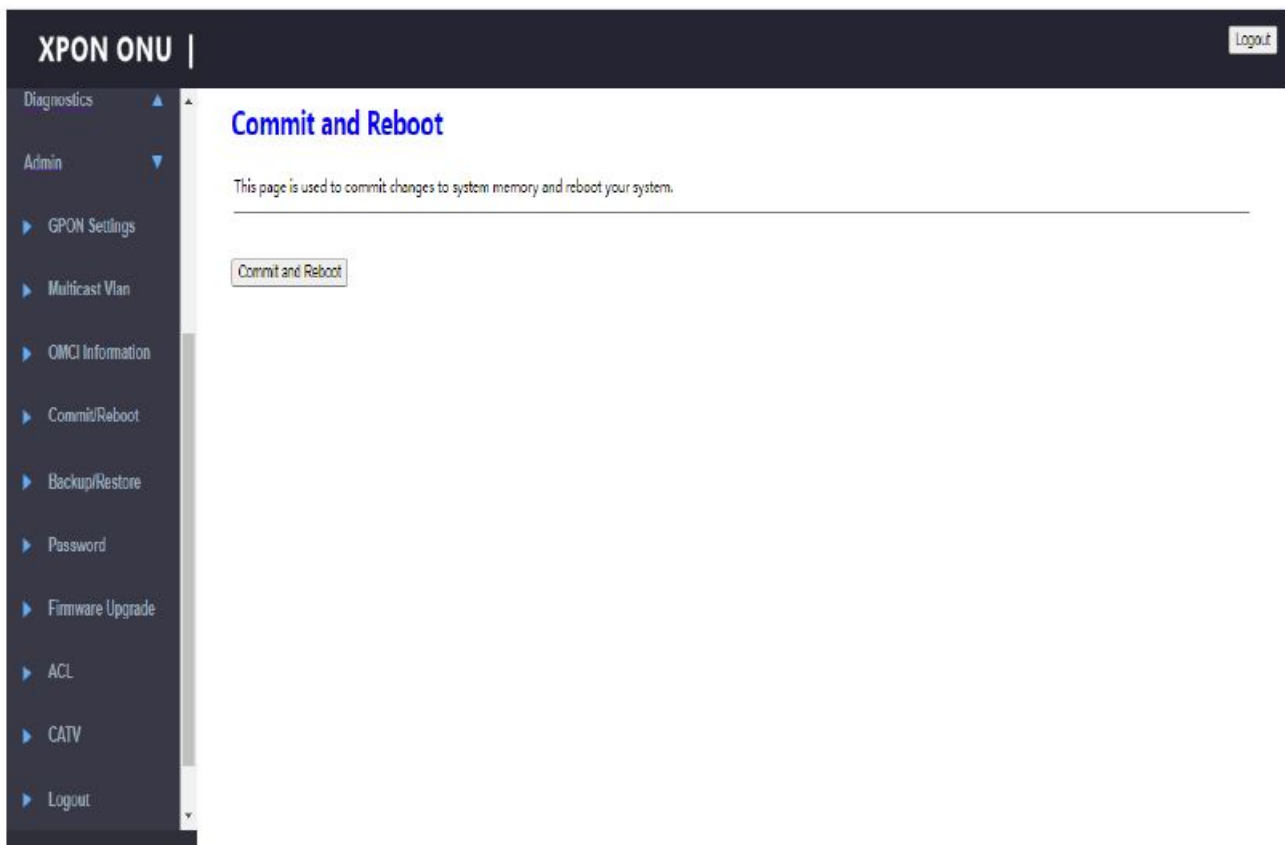

Service Menu display DHCP, Firewall, UPnP and RIP, about the Firewall Part, including the IP/Port Filtering, Mac Filtering, Porting Forwarding and DMZ.
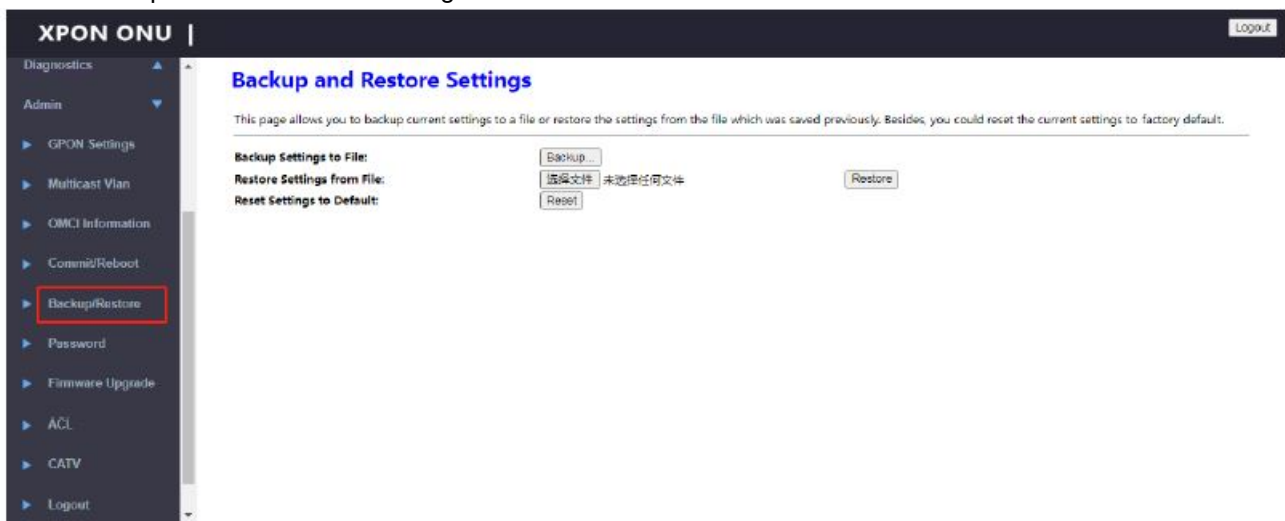**Note:**
For IP/Port and Mac filtering configuration, it would be helpful in securing or restricting your local network.
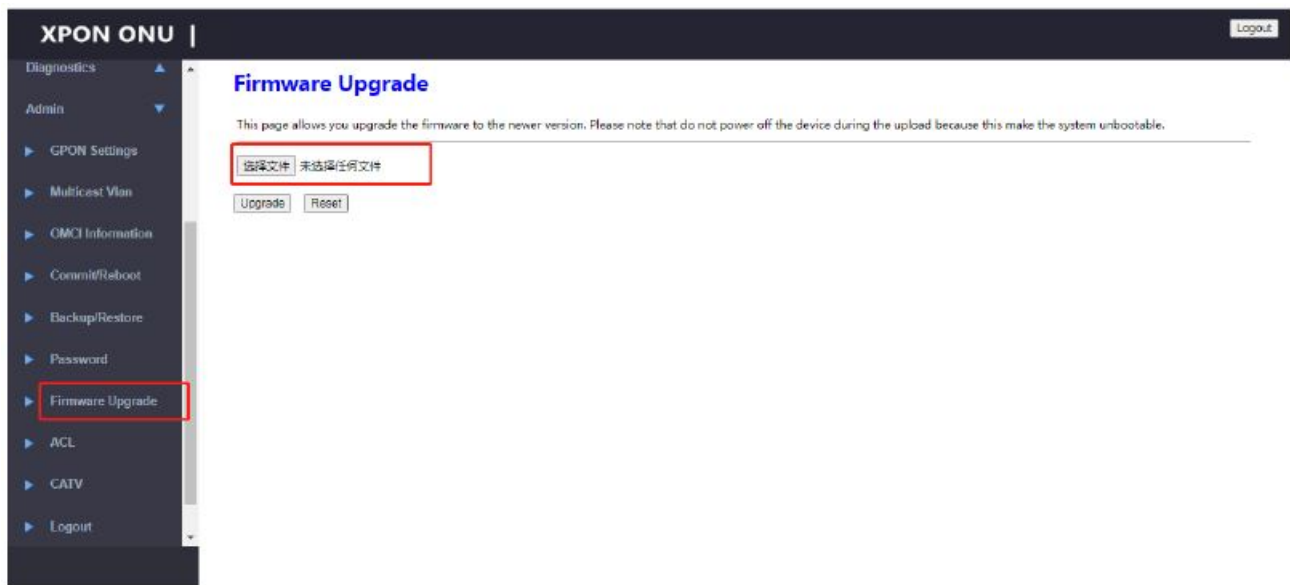**Admin**

Reboot: The operation to commit changes and reboot the device.

Backup: The operation to backup current settings.

Restore Settings from File:The operation allows to restore the settings from the correct saved file.

Restore to default: The operation to reset the current settings to factory default. Note: Press RST button over 10 seconds, ONU can restore factory default and reboot.
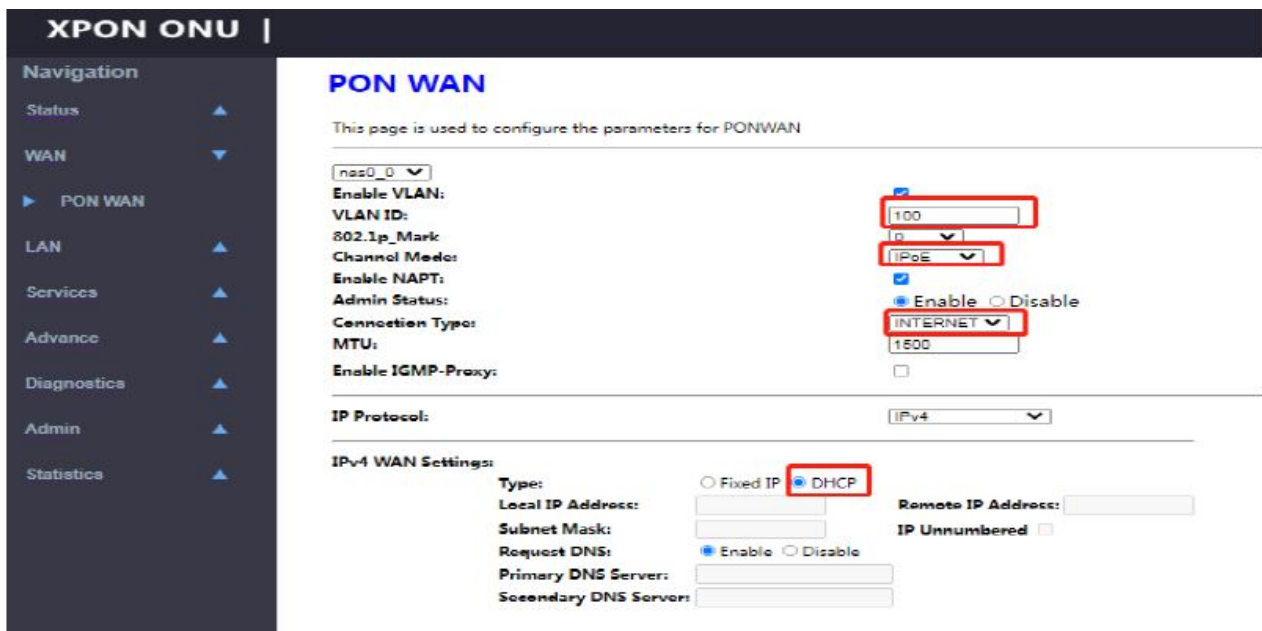
Firmware upgrade: The operation allows upgrade the firmware to the new version. Click the "choose file" button to select the software and click the "Upgrade" button to update. Note: During the upgrade process, please don't power off the device .Otherwise it will make the system broken.
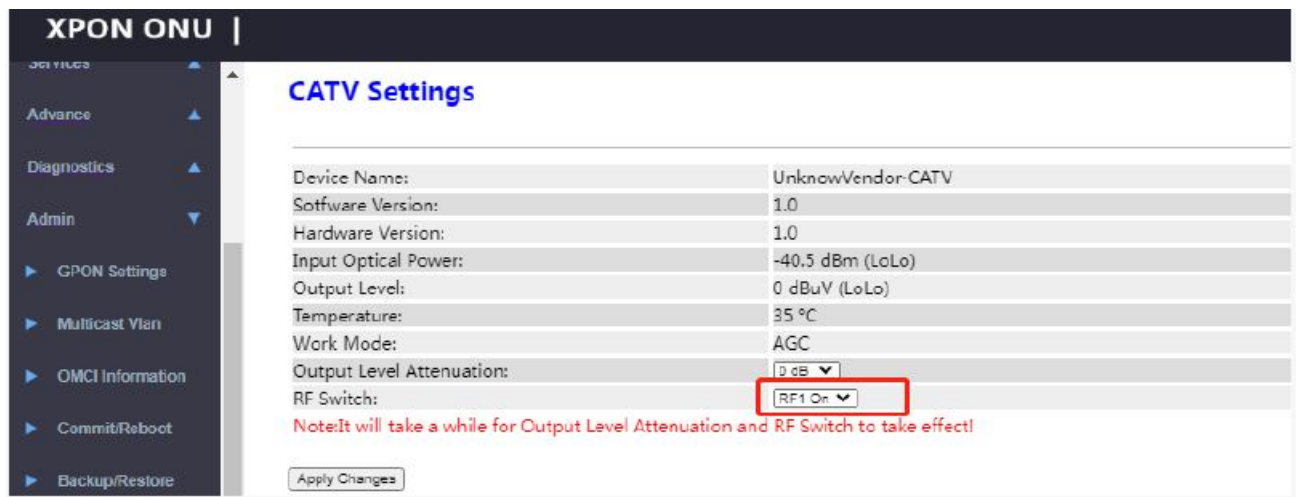
Configure IPOE/PPPOE Internet access

VLAN 100 is used for the Internet, and DHCP automatically assigns IP addresses

1. register ONT to OLT, Please contact your ISP. You can check the register status Indicators on the front panel.
2. Login to ONT,create a WAN connection with VLAN ID 100, Channel Mode is IPoE,
3. Connection Type is Internet .

4. Create a WAN connection whose VLAN ID is 100. Set the channel mode to PPPoE and co nnection type to Internet Then enter the PPPoE user name and password provided by the ISP.

CATV Settings

Device Name:	UnknowVendor-CATV
Sotfware Version:	1.0
Hardware Version:	1.0
Input Optical Power:	-40.5 dBm (LoLo)
Output Level:	0 dBuV (LoLo)
Temperature:	35 °C
Work Mode:	AGC
Output Level Attenuation:	0 dB ▼
RF Switch:	RF1 On ▼

Note:It will take a while for Output Level Attenuation and RF Switch to take effect!

[Apply Changes]

Sidebar navigation: Services, Advance, Diagnostics, Admin ▾, GPON Settings, Multicast Vlan, OMCI Information, Commit/Reboot, Backup/Restore

HWTC OLT command for controlling the CATV
MA5608T(config-if-gpon-0/0)#ont port attribute 7 0 catv 1 operational-state off MA5608T(config-if-gpon-0/0)#ont port attribute 7 0 catv 1 operational-state on

Trouble Shooting

1. After power, why are all the lights lit?Reasons:
2. Power connection errors;

   Power is not normal. Solution:
   1. Check that the power cable is connected;
   2. The rear panel of the power supply is turned on.
3. Why does LED of LAN not light?Reasons:
   1. Network cable is damaged or loose connection;
   2. Cable type errors;
   3. Long lines outside the allowable range.

Why does LED of PON flashed instead of always on?

Reasons:

1. Fiber optic connector is loose;
2. Fiber optic connector is dust;
3. Optical line terminal error; Solution:

After working for some time to stop working?Reasons:

1. Power supply is not working properly;
2. The equipment from overheating.

Solution:

1. Check if there is contact with abnormal voltage is too high or too low;
2. Check the ambient conditions, vents are nominal ventilation.

Documents / Resources

Baudcom BD-ONU-311RT 1GE+CATV XPON ONU Modem [pdf] User Manual
BD-ONU-311RT, 1GE CATV XPON ONU Modem, BD-ONU-311RT 1GE CATV XPON ONU Modem

References

- **Home - Baudcom**