

Realtek New Solution EPON SFU Products

4GE/4GE+CATV/1GE+3FE/1GE+3FE+CATV

User Manual

Version: V1.1

Content

1 Note.....	3
1.1 Installation Precautions.....	3
1.2 Precautions for Use.....	3
2 Brief.....	4
2.1 Product Feature.....	5
2.2 Product Specification.....	5
2.3 Device Interface Definition.....	6
2.4 Device Connection.....	6
2.5 Applications.....	7
2.6 ONU Instructions.....	7
3 Login Web Management Locally.....	7
3.1 Physical Connection of ONU and PC.....	7
3.2 PC Access the WEB of ONU.....	8
4 View ONU System Status.....	10
4.1 View ONU Device Information.....	10
4.2 View ONU PON Status.....	10
4.3 View ONU CATV Status Information.....	11
4.4 View ONU LAN Port Information.....	12
4.5 View ONU Port VLAN Information.....	12
5 Configure LAN IP Address of ONU.....	13
6 View ONU LAN Side User Information.....	13
7 ONU Diagnostic.....	14
8 ONU System Management.....	15
8.1 Register LOID of ONU Config.....	15
8.2 CATV Settings.....	16
8.3 Port Isolation Settings.....	17
8.4 ONU for OLT Adapt Settings Configuration.....	17
8.5 ONU Loop Diagnostic.....	18
8.6 Reboot ONU.....	19
8.7 ONU Chinese and English Interface Switch.....	20
8.8 Reset Settings to Default.....	21
8.9 Modify the Account and password.....	22
8.10 Upgrade the ONU.....	23
9 ONU Interface Traffic Statistics.....	24
9.1 PON Statistics.....	24
9.2 ONU LAN Interface Traffic Statistics.....	25
Concluding Remarks.....	26

1 Note

1.1 Installation Precautions

- Do not place the equipment near flammable or conductive items, high temperatures (such as direct sunlight) or in wet conditions, or on a PC chassis, and check that the surrounding appliances are stable.
- Check the cable for aging. Check and verify that the AC or DC input voltage is within the permissible range of the device and that the polarity of the DC is correct.
- Unless the manufacturer permit, use the type of power indicated on the label and the adapter supplied with the product.
- To prevent damage to the product from lightning, make sure that the ground of the power outlet and the power adapter is securely grounded. In the thunderstorm, be sure to unplug the power and all the connections.
- Equipment input voltage fluctuation should be less than 10%, the power plug, refrigerators, hair dryer and iron should not use the same socket.
- To avoid electric shock or fire due to overload of the power outlet, damage to the cord or damage to the plug, check the power cord regularly. If damage is found, replace it immediately.
- Please place the device on a flat surface and can not place items on the device.
- Equipment is easy to produce heat when working, should maintain the appropriate cooling space to avoid damage caused by overheating products. The elongated hole on the shell is designed for heat dissipation. Keep the ventilation clean and avoid falling from the heat sink into the equipment. Otherwise, the equipment may be damaged or fire. Do not spill liquid onto the surface of the equipment.

1.2 Precautions for Use

- Please read the user manual carefully before using the equipment and follow all the precautions on the user manual and the product.
- Avoid eye looked at the optical interface directly, so as to avoid the laser beam emitted by the interface damage the eyes. Please try to wear safety glasses to effectively protect your eyes from damage. It is best to plug in the fiber optic interface jacket when the optical interface is not in use .
- Turn off the power when the device is not in use

- Before plugging the power supply, make sure that the power switch is turned off to avoid surge. Be careful when unplugging the power supply and the transformer temperature may be high.
- To ensure safety, do not open the enclosure of the device, especially when the device is powered up.
- Unplug the power supply before cleaning the equipment. Use a soft dry cloth to clean the equipment to avoid the use of liquids or sprays.
- Do not connect this product to any electronic product unless it is instructed by our customer engineer or your broadband supplier, as any incorrect connection may cause power or fire hazard.

2 Brief

Realtek New Solution EPON SFU series of terminal equipment is based on EPON technology based on the broadband access market, to meet the broadcaster operators broadband access and FTTH, and design passive optical network terminal products that integrate CATV optical receiver and achieve broadband, CATV dual network integration. It is based on mature and stable, cost-effective Gigabit EPON technology and integrate Gigabit Ethernet switching technology, WDM technology and HFC light reception technology, with high reliability, easy management and good quality of service (QoS) and so on. Technical performance of equipment meet the IEEE802.3ah, China Telecom EPON equipment technical requirements (V2.1 / V3.0) and other requirements.

EPON technology is a combination of PON technology and Ethernet technology advantages of emerging technologies, is a point to multi-point networking technology, with high bandwidth, high efficiency, large coverage, rich user interface and many other advantages, is the operator to achieve access network business broadband, integrated transformation of the ideal technology.

Realtek New Solution EPON SFU series terminal devices are equipped with 1-4 10/100/1000M adaptive interface and a CATV interface. The equipment has been implemented with EPON central office equipment (Huawei / ZTE / FiberHome / Alcatel-Lucent) OLT interoperability, composed of Gigabit systems, to meet access needs of the two-in-one video, data services, FTTH / FTTO.

Note: This manual is written in the form of 4GE+CATV EPON ONU, and other models ONU can also be referenced.

2.1 Product Feature

- Single-fiber or dual-fiber access, providing broadband, CATV, IPTV service access, and so on.
- Equipment technical performance meets IEEE802.3ah, China Telecom CTC 2.1 &

CTC3.0 standard

- Support VLAN Transparent、Tag、Trunk、Translation、QinQ function
- Support up and down bandwidth limit function
- Support port loop detection / port link status detection
- Support upgrade through the OLT remote / local ONU WEB
- Support broadcast storm suppression
- Different data ports are isolated from each other
- Support port flow control
- Support multiple multicast forwarding mode: igmp snooping, igmp proxy
- Support OLT as SNMP-agent way of the unified management of the network management, easy to install and maintain
- Provide a variety of fault alarm function, easy to fault diagnosis
- Support AES-128 decryption, support key generation and switching
- Support DBA technology and priority based on the dual management model to ensure that the user's minimum specified bandwidth requirements
- QoS guarantee for different priority services through SLA constraint, Policing, queue management scheduling / congestion avoidance, discard management
- Supports entry-based traffic control, we can select Pause frame to limit.
- Support HQoS Function
- Support CATV service remote shutdown function
- Operating wavelength: 1100 - 1600nm

2.2 Product Specification

Ambient temperature: 0°C~40°C

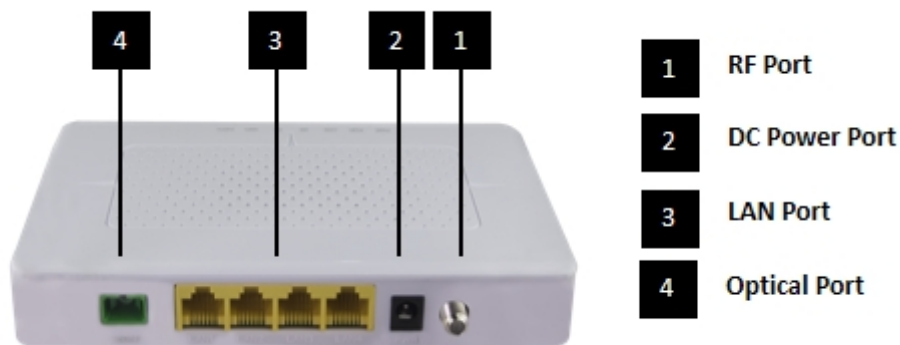
Relative humidity: 10% to 90% (non-condensing)

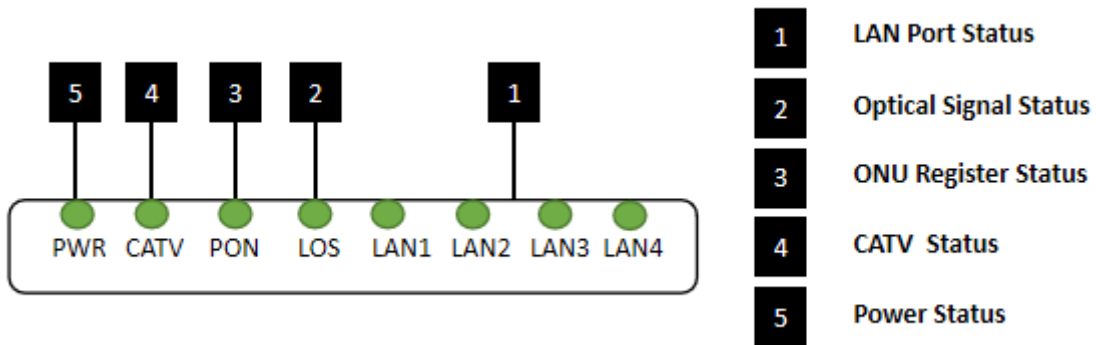
Power adapter input: 12 V/1A

TX Optical Power: 0~4dBm

RX Optical Power: -3~-27dBm

2.3 Device Interface Definition



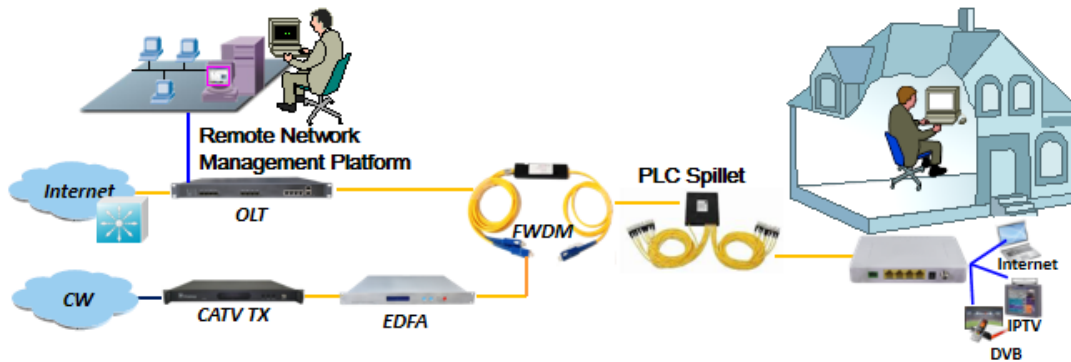


Indicator		Description	
1	LAN1-4	LAN Port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;
2	LOS	EPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
3	PON	ONU Register	On: Success to register to OLT Blinking: In process of registering to OLT; Off: In process of registering to OLT;
4	CATV	CATV status	On: CATV optical normal Off: The CATV signals are not received
5	PWR	Power status	On: The ONU is power on; Off: The ONU is Power off;

2.4 Device Connection

- Connect the fiber: Insert the SC fiber connector into the PON connector on the rear panel of the ONU.
- Connect the Ethernet cable: Connect the RJ-45 Ethernet cable to any LAN port and each home device, that is, the computer, IPTV set-top box, and so on.
- Connect coaxial cable: Connect the coaxial cable to the RF connector of the ONU.
- Connect the AC adapter: Plug the AC / DC adapter into the AC wall jack and the ONU 12V DC power jack.

2.5 Applications



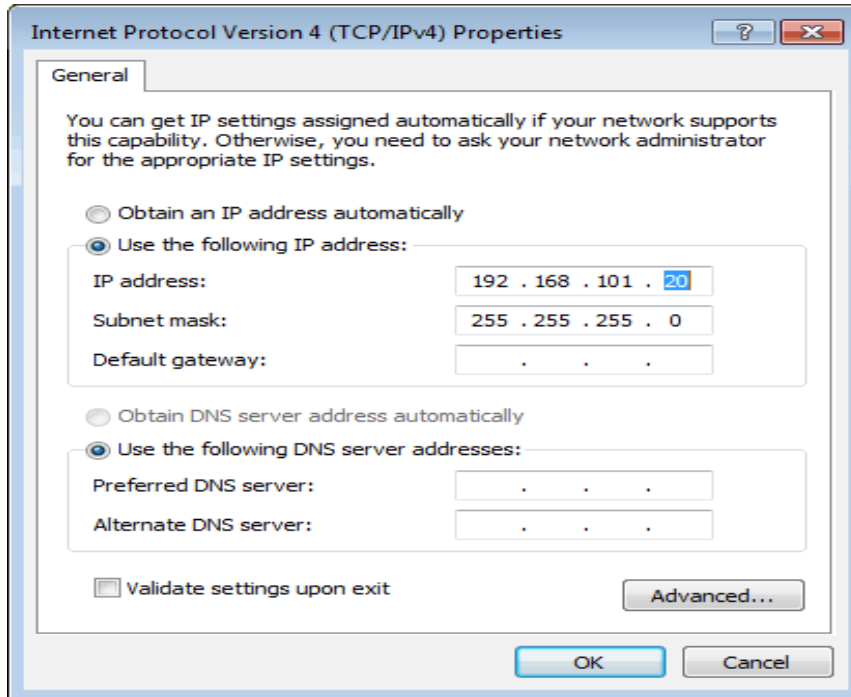
2.6 ONU Instructions

Realtek EPON SFU ONU is mainly work in the bridge mode, all the configuration of ONU (ONU port vlan, ONU port speed limit, etc.) are basically configured through the OLT, but also through the OLT and EMS network management to manage, It does not need to be configured on the ONU's local WEB. The configuration manual is to guide customers to do some basic view and configuration operation for Realtek EPON SFU ONU. Other configurations of the ONU can be configured according to each manufacturer's OLT configuration manual.

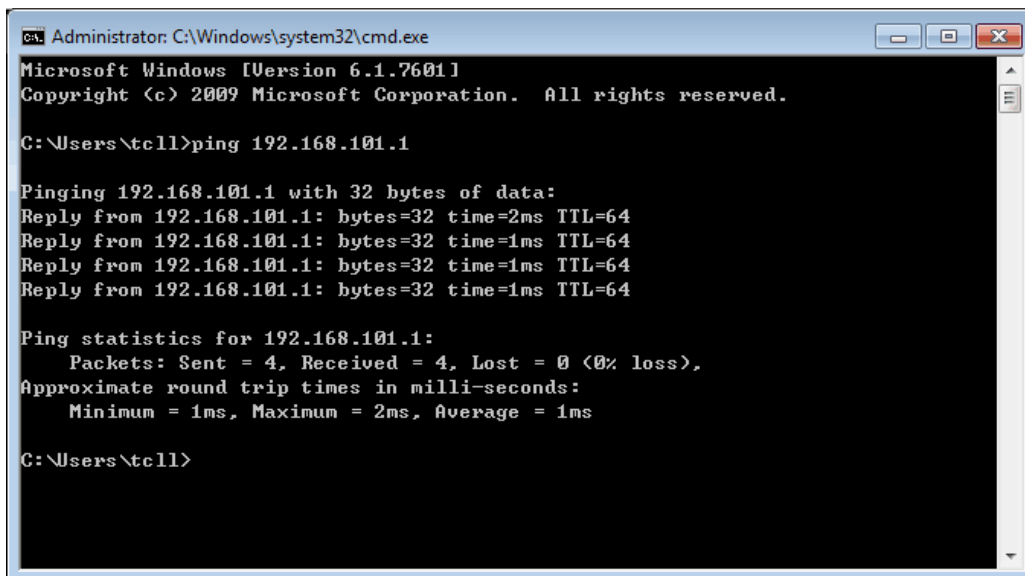
3 Login Web Management Locally

3.1 Physical Connection of ONU and PC

- Local NIC of PC connects to LAN port or ETH port of ONU via wires.
- Set the IP address of PC's local NIC as **192.168.101.X (X: 2-254)**.



- c) Open cmd windows and make sure that PC can ping the management IP (**192.168.101.1**) of ONU.



3.2 PC Access the WEB of ONU

Make sure you can ping the ONU like #3.1. Open the **IE Web browser (IE, Firefox, Google)**, copy and paste URL: <http://192.168.101.1>, the following pop-up Prompt landing page:

Please login to continue... English ▼

Username

Password

Input UserName: **adminisp** Password: **adminisp**

Click “**Login**” button. The product basics page appears, as follows:

Status	LAN	Advance	Diagnostics	Admin	Statistics
--------	-----	---------	-------------	-------	------------

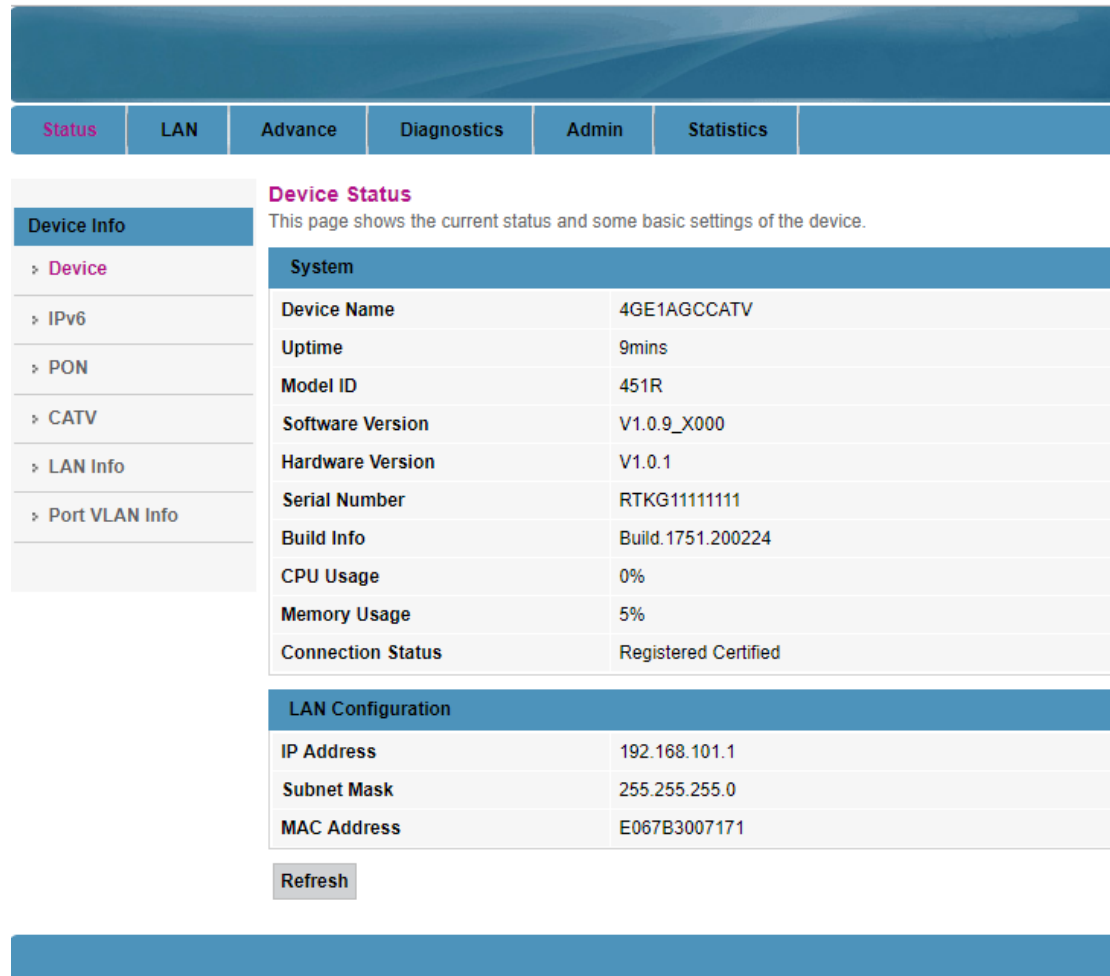
Device Info <ul style="list-style-type: none"> > Device > IPv6 > PON > CATV > LAN Info > Port VLAN Info 	<p>Device Status This page shows the current status and some basic settings of the device.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #0070C0; color: white;"> <th colspan="2">System</th> </tr> </thead> <tbody> <tr><td>Device Name</td><td>4GE1AGCCATV</td></tr> <tr><td>Uptime</td><td>9mins</td></tr> <tr><td>Model ID</td><td>451R</td></tr> <tr><td>Software Version</td><td>V1.0.9_X000</td></tr> <tr><td>Hardware Version</td><td>V1.0.1</td></tr> <tr><td>Serial Number</td><td>RTKG11111111</td></tr> <tr><td>Build Info</td><td>Build.1751.200224</td></tr> <tr><td>CPU Usage</td><td>0%</td></tr> <tr><td>Memory Usage</td><td>5%</td></tr> <tr><td>Connection Status</td><td>Registered Certified</td></tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #0070C0; color: white;"> <th colspan="2">LAN Configuration</th> </tr> </thead> <tbody> <tr><td>IP Address</td><td>192.168.101.1</td></tr> <tr><td>Subnet Mask</td><td>255.255.255.0</td></tr> <tr><td>MAC Address</td><td>E067B3007171</td></tr> </tbody> </table> <p style="text-align: center;"><input type="button" value="Refresh"/></p>	System		Device Name	4GE1AGCCATV	Uptime	9mins	Model ID	451R	Software Version	V1.0.9_X000	Hardware Version	V1.0.1	Serial Number	RTKG11111111	Build Info	Build.1751.200224	CPU Usage	0%	Memory Usage	5%	Connection Status	Registered Certified	LAN Configuration		IP Address	192.168.101.1	Subnet Mask	255.255.255.0	MAC Address	E067B3007171
System																															
Device Name	4GE1AGCCATV																														
Uptime	9mins																														
Model ID	451R																														
Software Version	V1.0.9_X000																														
Hardware Version	V1.0.1																														
Serial Number	RTKG11111111																														
Build Info	Build.1751.200224																														
CPU Usage	0%																														
Memory Usage	5%																														
Connection Status	Registered Certified																														
LAN Configuration																															
IP Address	192.168.101.1																														
Subnet Mask	255.255.255.0																														
MAC Address	E067B3007171																														

You can start further configuration.

4 View ONU System Status

4.1 View ONU Device Information

Login ONU WEB. Click **Status** → **Device**, we can view the **Device Name**, **Uptime**, **Model ID**, **Software Version**, **Hardware Version**, **Build Information**, **IP Address**, **MAC Address** and so on.



The screenshot shows the ONU WEB interface with a navigation bar at the top containing tabs for Status, LAN, Advance, Diagnostics, Admin, and Statistics. The 'Status' tab is active. On the left, there is a 'Device Info' sidebar with a tree view where 'Device' is selected. The main content area displays the 'Device Status' page, which includes a description and two data tables: 'System' and 'LAN Configuration'. A 'Refresh' button is located below the tables.

System	
Device Name	4GE1AGCCATV
Uptime	9mins
Model ID	451R
Software Version	V1.0.9_X000
Hardware Version	V1.0.1
Serial Number	RTKG11111111
Build Info	Build.1751.200224
CPU Usage	0%
Memory Usage	5%
Connection Status	Registered Certified

LAN Configuration	
IP Address	192.168.101.1
Subnet Mask	255.255.255.0
MAC Address	E067B3007171

Refresh

4.2 View ONU PON Status

Login ONU WEB. Click **Status** → **PON**, we can view the **Register Status**, **Rx Power** and **Tx Power** and so on.



Status	LAN	Advance	Diagnostics	Admin	Statistics
------------------------	---------------------	-------------------------	-----------------------------	-----------------------	----------------------------

PON Status	
This page shows the current system status of PON.	
Device Info	PON Status
› Device	Temperature 29.820313 C
› IPv6	Voltage 3.282100 V
› PON	Tx Power 2.390251 dBm
› CATV	Rx Power -3.217548 dBm
› LAN Info	Bias Current 9.600000 mA
› Port VLAN Info	EPON LLID Status
	Status Up
	<input type="button" value="Refresh"/>



4.3 View ONU CATV Status Information

Login ONU WEB. Click **Status** → **CATV**, we can view the CATV information.



Status	LAN	Advance	Diagnostics	Admin	Statistics
------------------------	---------------------	-------------------------	-----------------------------	-----------------------	----------------------------

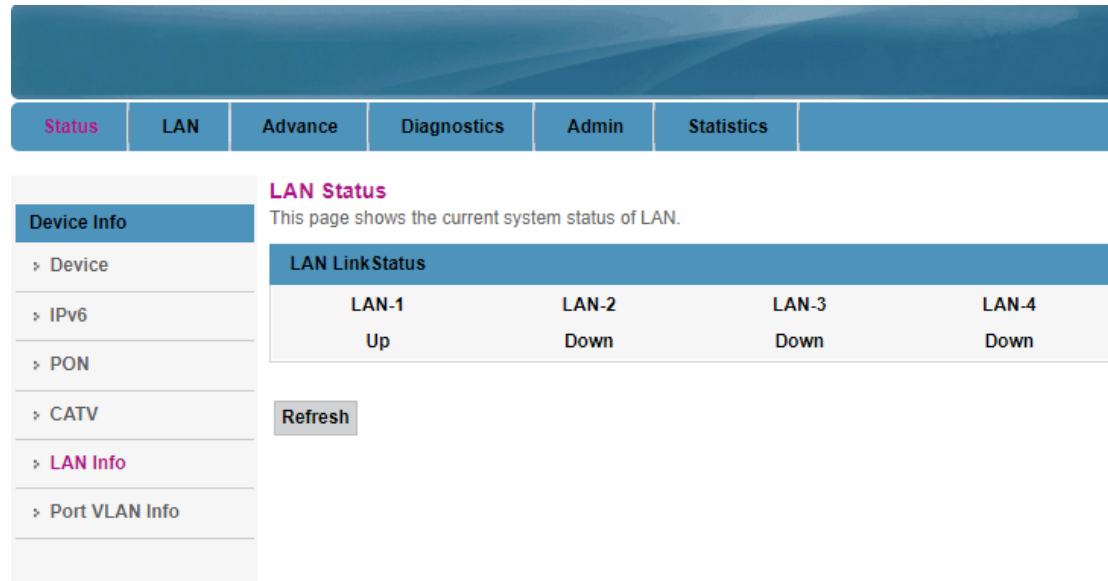
CATV Status	
This page shows the current system status of CATV.	
Device Info	CATV Status
› Device	Vcc 0.0 V
› IPv6	Temperature 486.4 °C
› PON	RfOutputPower 108.0 dBuV
› CATV	InOpticalPower 0.0 dBm
› LAN Info	VccAlarmState
› Port VLAN Info	TempAlarmState
	RfAlarmState

VccDead	0.0 V
VccLow	0.0 V
VccHigh	0.0 V
TempDead	0.0 °C
TempLow	76.8 °C
TempHigh	76.8 °C
RfDead	0.0 dBuV
RfLow	76.8 dBuV
RfHigh	76.8 dBuV
InOptPwrDead	0.0 dBm
InOptPwrLow	0.0 dBm
InOptPwrHigh	0.0 dBm
Channel	0
AgcLowLimit	0.0 dBm
AgcHighLimit	0.0 dBm
CATV Status	on

Refresh

4.4 View ONU LAN Port Information

Login ONU WEB. Click **Status** → **LAN Info**, we can view onu each port status information.



The screenshot shows the ONU WEB interface with a navigation bar containing: Status, LAN, Advance, Diagnostics, Admin, and Statistics. The 'LAN Status' page is active, displaying the current system status of LAN. A sidebar on the left lists navigation options: Device Info, Device, IPv6, PON, CATV, LAN Info (highlighted), and Port VLAN Info. The main content area shows a table for LAN Link Status with columns for LAN-1, LAN-2, LAN-3, and LAN-4. Below the table is a 'Refresh' button.

LAN LinkStatus			
LAN-1	LAN-2	LAN-3	LAN-4
Up	Down	Down	Down

Refresh

4.5 View ONU Port VLAN Information

Login ONU WEB. Click **Status** → **Port VLAN Info**, we can view onu each port vlan mode and config information.

Status | LAN | Advance | Diagnostics | Admin | Statistics

Device Info

- > Device
- > IPv6
- > PON
- > CATV
- > LAN Info
- > Port VLAN Info

VLAN Status

This page shows the current system status of VLAN.

VLAN Status		
Port	Mode	Config
1	transparent	n/a
2	transparent	n/a
3	transparent	n/a
4	transparent	n/a

Refresh

5 Configure LAN IP Address of ONU

Login ONU WEB. Click LAN, we can change IP address and subnet mask of local management.

Status | LAN | Advance | Diagnostics | Admin | Statistics

LAN

- > LAN Interface
- Settings

LAN Interface Settings

This page is used to configure the LAN interface of your Device. Here you may change the setting for IP addresses, subnet mask, etc..

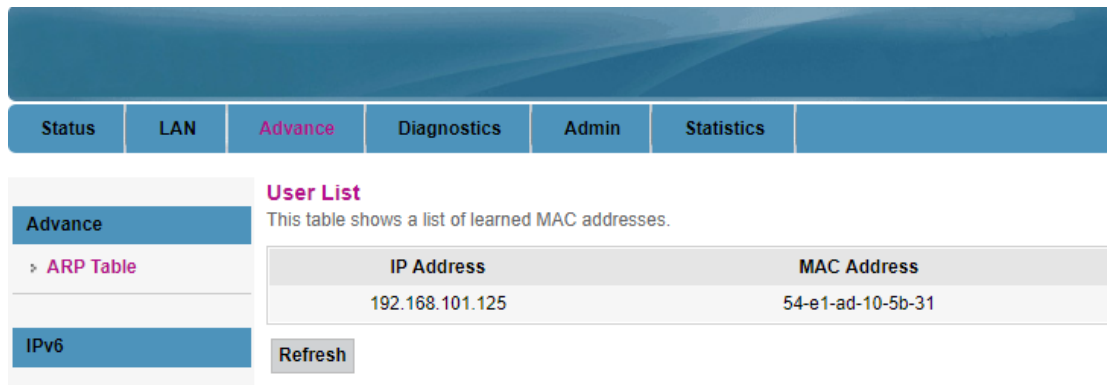
InterfaceName:	br0
IP Address:	<input type="text" value="192.168.101.1"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>

Apply Changes

6 View ONU LAN Side User Information

Login ONU WEB. Click **Advance** → **ARP Table**, we can view the **IP Address** and **MAC**

Address of every user that connect to the lan port of ONU.



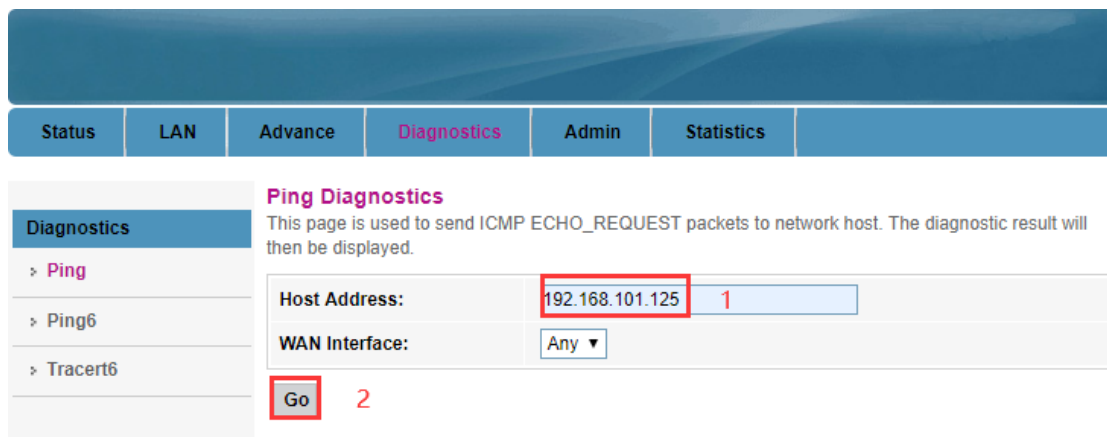
The screenshot shows the ONU web interface with the 'Advance' tab selected. Under 'Advance', the 'ARP Table' is expanded. A table titled 'User List' displays learned MAC addresses. The table has two columns: 'IP Address' and 'MAC Address'. One entry is shown: IP Address 192.168.101.125 and MAC Address 54-e1-ad-10-5b-31. A 'Refresh' button is located below the table.

IP Address	MAC Address
192.168.101.125	54-e1-ad-10-5b-31

7 ONU Diagnostic

Ping diagnostic of Realtek SFU ONU is mainly used to test connectivity between ONU and client devices

Login ONU WEB. Click **Diagnostics** → **Ping**, type terminal IP address that connect to the ONU lan port, and click 'GO' button to test the connectivity



The screenshot shows the ONU web interface with the 'Diagnostics' tab selected. Under 'Diagnostics', the 'Ping' option is expanded. The 'Ping Diagnostics' section contains a form with the following fields: 'Host Address' (192.168.101.125), 'WAN Interface' (Any), and a 'Go' button. The number '1' is in a small box next to the Host Address field, and the number '2' is next to the Go button.

Host Address:	192.168.101.125	1
WAN Interface:	Any	
Go	2	

Status	LAN	Advance	Diagnostics	Admin	Statistics
--------	-----	---------	-------------	-------	------------

Diagnostics	<p>PING 192.168.101.125 (192.168.101.125): 56 data bytes</p> <p>64 bytes from 192.168.101.125: icmp_seq=0 64 bytes from 192.168.101.125: icmp_seq=1 64 bytes from 192.168.101.125: icmp_seq=2</p> <p>--- ping statistics --- 3 packets transmitted, 3 packets received.</p> <p style="text-align: center;"><input type="button" value="Back"/></p>
<ul style="list-style-type: none"> › Ping › Ping6 › Tracert6 	

8 ONU System Management

8.1 Register LOID of ONU Config

The LOID of ONU is mainly used for the authentication of LOID and LOID+Password from OLT. By default, EPON ONU register to the OLT by MAC address but less LOID so that we needn't configure the LOID. But the way to configure the LOID is as below

Login ONU WEB. Click **Admin** → **EPON Settings**, we can configure the LOID and LOID password, and click 'Apply Changes' button to finish the settings.

Status	LAN	Advance	Diagnostics	Admin	Statistics
--------	-----	---------	-------------	-------	------------

Admin	<p style="color: red;">EPON Settings</p> <p>This page is used to configure the parameters for your EPON network access.</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">LOID:</td> <td><input type="text" value="user"/></td> </tr> <tr> <td>LOID Password:</td> <td><input type="text" value="password"/></td> </tr> </table> <p style="text-align: center;"><input type="button" value="Apply Changes"/></p>	LOID:	<input type="text" value="user"/>	LOID Password:	<input type="text" value="password"/>
LOID:	<input type="text" value="user"/>				
LOID Password:	<input type="text" value="password"/>				
<ul style="list-style-type: none"> › EPON Settings › CATV Settings › Port Isolation › Settings › Adapt Settings › Loop Detect › Commit/Reboot › Multi-language › Settings Restore › Account › Configuration Upgrade › Time Zone › Logout 					

8.2 CATV Settings

Login ONU WEB. Click **Admin** → **CATV Settings**, we can enable or diable CATV port and configure other parameters of CATV, and click ‘**Apply Changes**’ button to finish the settings.

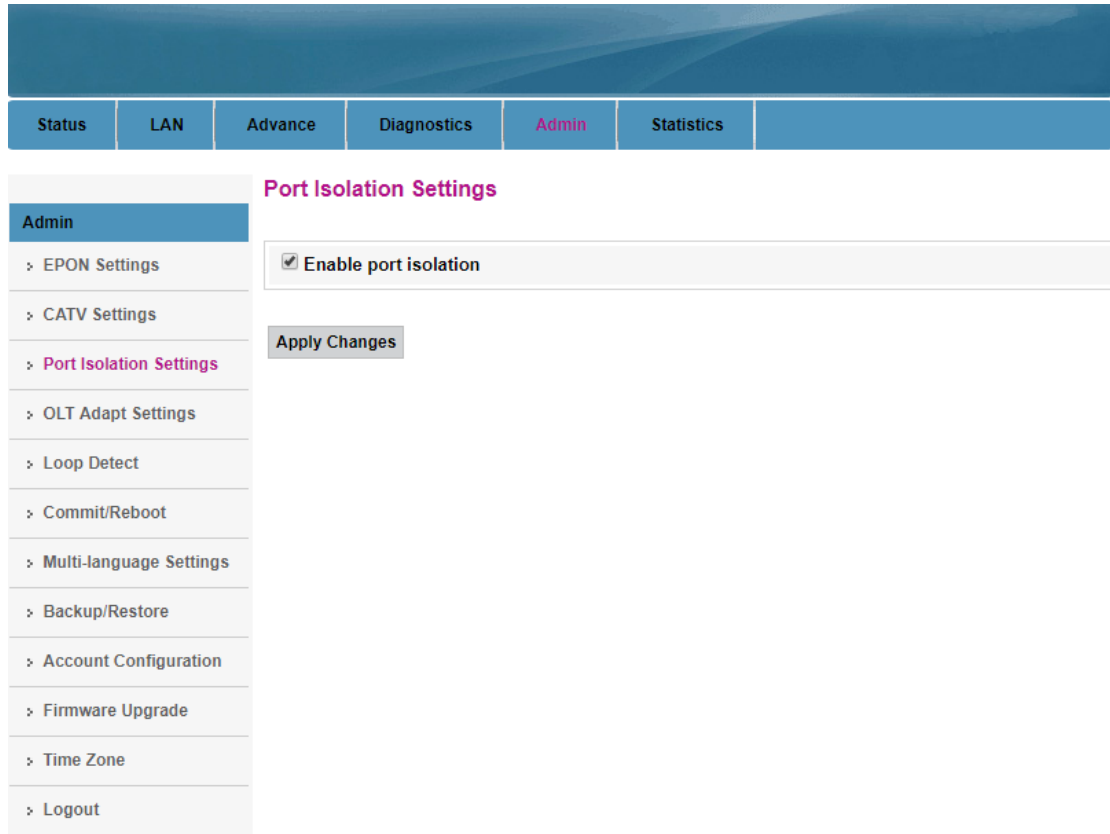
Status | LAN | Advance | Diagnostics | Admin | Statistics

<div style="background-color: #0056b3; color: white; padding: 2px;">Admin</div> <ul style="list-style-type: none"> › EPON Settings <li style="color: #ff69b4;">› CATV Settings › Port Isolation Settings › OLT Adapt Settings › Loop Detect › Commit/Reboot › Multi-language Settings › Backup/Restore › Account Configuration › Firmware Upgrade › Time Zone › Logout 	<h3 style="color: #ff69b4;">CATV Settings</h3> <p style="font-size: small;">This page is used to configure the CATV</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #0056b3; color: white;"> <th colspan="2">CATV Status</th> </tr> </thead> <tbody> <tr><td>Vcc</td><td>0.0 V</td></tr> <tr><td>Temperature</td><td>486.4 °C</td></tr> <tr><td>RfOutputPower</td><td>108.0 dBuV</td></tr> <tr><td>InOpticalPower</td><td>0.0 dBm</td></tr> <tr><td>VccAlarmState</td><td></td></tr> <tr><td>TempAlarm State</td><td></td></tr> <tr><td>RfAlarm State</td><td></td></tr> <tr><td>InpwrAlarm State</td><td></td></tr> <tr><td>VccDead(0.0 ~ 5.0)</td><td><input type="text" value="0.0"/> V</td></tr> <tr><td>VccLow(0.0 ~ 20.0)</td><td><input type="text" value="0.0"/> V</td></tr> <tr><td>VccHigh(0.0 ~ 20.0)</td><td><input type="text" value="0.0"/> V</td></tr> <tr><td>TempDead(0.0 ~ 5.0)</td><td><input type="text" value="0.0"/> °C</td></tr> <tr><td>TempLow(-30.0 ~ 100.0)</td><td><input type="text" value="76.8"/> °C</td></tr> <tr><td>TempHigh(-30.0 ~ 100.0)</td><td><input type="text" value="76.8"/> °C</td></tr> <tr><td>RfDead(0.0 ~ 5.0)</td><td><input type="text" value="0.0"/> dBuV</td></tr> <tr><td>RfLow(50.0 ~ 100.0)</td><td><input type="text" value="76.8"/> dBuV</td></tr> <tr><td>RfHigh(50.0 ~ 100.0)</td><td><input type="text" value="76.8"/> dBuV</td></tr> <tr><td>InOptPwrDead(0.0 ~ 5.0)</td><td><input type="text" value="0.0"/> dBm</td></tr> <tr><td>InOptPwrLow(-60.0 ~ 10.0)</td><td><input type="text" value="0.0"/> dBm</td></tr> <tr><td>InOptPwrHigh(-60.0 ~ 10.0)</td><td><input type="text" value="0.0"/> dBm</td></tr> <tr><td>Channel(0 ~ 100)</td><td><input type="text" value="0"/></td></tr> <tr><td>AgcLowLimit</td><td>0.0 dBm</td></tr> <tr><td>AgcHighLimit</td><td>0.0 dBm</td></tr> <tr><td>CATV Status</td><td>on</td></tr> <tr><td><input checked="" type="checkbox"/> Enable CATV</td><td></td></tr> </tbody> </table> <div style="margin-top: 10px;"> Apply Changes Restore Default </div>	CATV Status		Vcc	0.0 V	Temperature	486.4 °C	RfOutputPower	108.0 dBuV	InOpticalPower	0.0 dBm	VccAlarmState		TempAlarm State		RfAlarm State		InpwrAlarm State		VccDead(0.0 ~ 5.0)	<input type="text" value="0.0"/> V	VccLow(0.0 ~ 20.0)	<input type="text" value="0.0"/> V	VccHigh(0.0 ~ 20.0)	<input type="text" value="0.0"/> V	TempDead(0.0 ~ 5.0)	<input type="text" value="0.0"/> °C	TempLow(-30.0 ~ 100.0)	<input type="text" value="76.8"/> °C	TempHigh(-30.0 ~ 100.0)	<input type="text" value="76.8"/> °C	RfDead(0.0 ~ 5.0)	<input type="text" value="0.0"/> dBuV	RfLow(50.0 ~ 100.0)	<input type="text" value="76.8"/> dBuV	RfHigh(50.0 ~ 100.0)	<input type="text" value="76.8"/> dBuV	InOptPwrDead(0.0 ~ 5.0)	<input type="text" value="0.0"/> dBm	InOptPwrLow(-60.0 ~ 10.0)	<input type="text" value="0.0"/> dBm	InOptPwrHigh(-60.0 ~ 10.0)	<input type="text" value="0.0"/> dBm	Channel(0 ~ 100)	<input type="text" value="0"/>	AgcLowLimit	0.0 dBm	AgcHighLimit	0.0 dBm	CATV Status	on	<input checked="" type="checkbox"/> Enable CATV	
CATV Status																																																					
Vcc	0.0 V																																																				
Temperature	486.4 °C																																																				
RfOutputPower	108.0 dBuV																																																				
InOpticalPower	0.0 dBm																																																				
VccAlarmState																																																					
TempAlarm State																																																					
RfAlarm State																																																					
InpwrAlarm State																																																					
VccDead(0.0 ~ 5.0)	<input type="text" value="0.0"/> V																																																				
VccLow(0.0 ~ 20.0)	<input type="text" value="0.0"/> V																																																				
VccHigh(0.0 ~ 20.0)	<input type="text" value="0.0"/> V																																																				
TempDead(0.0 ~ 5.0)	<input type="text" value="0.0"/> °C																																																				
TempLow(-30.0 ~ 100.0)	<input type="text" value="76.8"/> °C																																																				
TempHigh(-30.0 ~ 100.0)	<input type="text" value="76.8"/> °C																																																				
RfDead(0.0 ~ 5.0)	<input type="text" value="0.0"/> dBuV																																																				
RfLow(50.0 ~ 100.0)	<input type="text" value="76.8"/> dBuV																																																				
RfHigh(50.0 ~ 100.0)	<input type="text" value="76.8"/> dBuV																																																				
InOptPwrDead(0.0 ~ 5.0)	<input type="text" value="0.0"/> dBm																																																				
InOptPwrLow(-60.0 ~ 10.0)	<input type="text" value="0.0"/> dBm																																																				
InOptPwrHigh(-60.0 ~ 10.0)	<input type="text" value="0.0"/> dBm																																																				
Channel(0 ~ 100)	<input type="text" value="0"/>																																																				
AgcLowLimit	0.0 dBm																																																				
AgcHighLimit	0.0 dBm																																																				
CATV Status	on																																																				
<input checked="" type="checkbox"/> Enable CATV																																																					

8.3 Port Isolation Settings

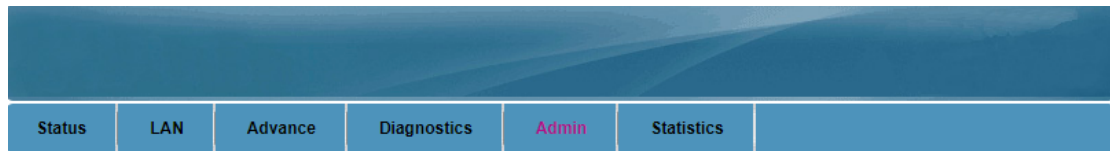
ONU ports isolation is mainly used to the terminal that connect to the ONU can communicate with each other or not.

Login ONU WEB. Click **Admin → Port Isolation Settings**, we can enable or disable port Isolation function in here, and click ‘**Apply Changes**’ button to finish the settings.



8.4 ONU for OLT Adapt Settings Configuration

Login ONU WEB. Click **Admin → Port Adapt Settings**, we can select ONU for OLT adapt mode in here, and click ‘**Apply Changes**’ button to finish the settings.



Admin

- › EPON Settings
- › CATV Settings
- › Port Isolation Settings
- › **OLT Adapt Settings**
- › Loop Detect
- › Commit/Reboot
- › Multi-language Settings
- › Backup/Restore
- › Account Configuration
- › Firmware Upgrade
- › Time Zone
- › Logout

OLT Adapt Settings Configuration

ONU auto detect the olt model, when olt limit the onu online, please open it

OLT ADAPT MODEL:	<input checked="" type="radio"/> Disabled
	<input type="radio"/> Auto
	<input type="radio"/> HUAWEI
	<input type="radio"/> ZTE
	<input type="radio"/> FIBERHOME
	<input type="radio"/> YOTC
	<input type="radio"/> UT

Apply Changes

Note: The default option of OLT adaptive mode is the "Disabled" state. The "Auto" mode is that the ONU automatically detect the model of the OLT. If the OLT model is known, you can select the corresponding model in the list, and the ONU is adapted accordingly.

8.5 ONU Loop Diagnostic

Login ONU WEB. Click **Diagnostics** → **Loop Detect**, we can enable or disable loop detect function of ONU.

Note: Configured the loop detect function, we have to pay attention to configuration of this function that configured via OLT. Some kinds of OLT will disable loop detect function by default.

Status | LAN | Advance | Diagnostics | Admin | Statistics

- Admin
- › EPON Settings
- › CATV Settings
- › Port Isolation Settings
- › OLT Adapt Settings
- › Loop Detect
- › Commit/Reboot
- › Multi-language Settings
- › Backup/Restore
- › Account Configuration
- › Firmware Upgrade
- › Time Zone
- › Logout

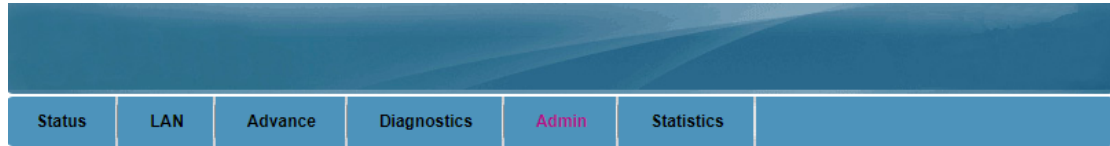
loop detection

Loop detection enable

Port Loopedetect Status			
LAN-1	LAN-2	LAN-3	LAN-4
forwarding	forwarding	forwarding	forwarding

8.6 Reboot ONU

Login ONU WEB. Click **Admin** → **Commit/Reboot**, click ‘**Commit and Reboot**’ button to save the configuration and reboot the ONU.



Commit and Reboot
This page is used to commit changes to system memory and reboot your system.

Admin	Commit and Reboot:	<input type="button" value="Commit and Reboot"/>
› EPON Settings		
› CATV Settings		
› Port Isolation Settings		
› OLT Adapt Settings		
› Loop Detect		
› Commit/Reboot		
› Multi-language Settings		
› Backup/Restore		
› Account Configuration		
› Firmware Upgrade		
› Time Zone		
› Logout		

8.7 ONU Chinese and English Interface Switch

Login ONU WEB. Click **Admin** → **Multi-Language Settings**. In here, we can change the language to Chinese or English, click '**Update selected language**' button to finish the settings.



- Admin
- EPON Settings
- CATV Settings
- Port Isolation Settings
- OLT Adapt Settings
- Loop Detect
- Commit/Reboot
- Multi-language Settings**
- Backup/Restore
- Account Configuration
- Firmware Upgrade
- Time Zone
- Logout

Multi-Language Setting

This page is used to set multi-language.

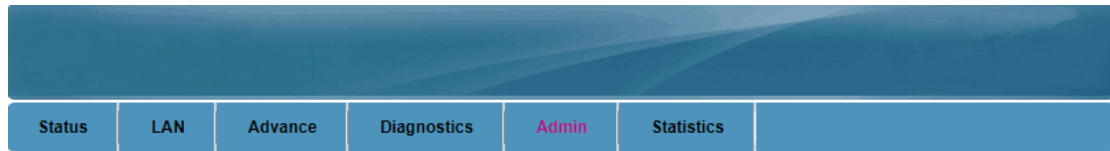
Language Select:

English ▼

Update selected language

8.8 Reset Settings to Default

Login ONU WEB. Click **Admin** → **Backup/Restore**. In here, we can backup and restore settings, and click **'Reset'** button to restore the ONU settings to default.



- Admin
- › EPON Settings
- › CATV Settings
- › Port Isolation Settings
- › OLT Adapt Settings
- › Loop Detect
- › Commit/Reboot
- › Multi-language Settings
- › **Backup/Restore**
- › Account Configuration
- › Firmware Upgrade
- › Time Zone
- › Logout

Backup and Restore Settings

This page allows you to backup current settings to a file or restore the settings from the file which was saved previously. Besides, you could reset the current settings to factory default.

Backup Settings to File:

Restore Settings from File:

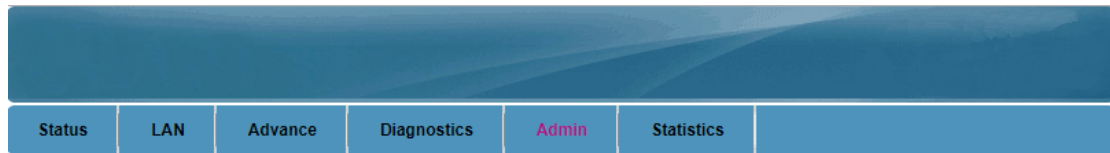
Reset Settings to Default:

8.9 Modify the Account and password

Default system management account and password are [adminisp/adminisp](#)

Default system common account and password are [admin/admin](#)

Login ONU WEB. Click **Admin** → **Account Configuration**. In here, we can change the password for management account and common account, and click '**Apply Changes**' button to finish the settings.



Account Configuration

This page is used to set the account to access the web server of your Device. Empty user name and password will disable the protection.

Username:	adminisp ▾
Old Password:
New Password:
Confirmed Password:

- Admin
- EPON Settings
- CATV Settings
- Port Isolation Settings
- OLT Adapt Settings
- Loop Detect
- Commit/Reboot
- Multi-language Settings
- Backup/Restore
- Account Configuration**
- Firmware Upgrade
- Time Zone
- Logout

8.10 Upgrade the ONU

Firstly, we have to get a newest firmware from provider.

Login ONU WEB. Click **Admin** → **Firmware Upgrade**. In here, click **‘Choose File’** button to select a upgrade file, and click **‘Upgrade’** button to upgrade the ONU.

Note: We needn't extract Realtek project production's firmware, just upgrade the .tar file. It will take 4 minutes to upgrade. After upgrading, the ONU will reboot automatically. We needn't reboot it by manual.

Status	LAN	Advance	Diagnostics	Admin	Statistics
--------	-----	---------	-------------	-------	------------

Admin	Firmware Upgrade
› EPON Settings	This page allows you upgrade the firmware to the newer version. Please note that do not power off the device during the upload because this make the system unbootable.
› CATV Settings	<input type="text" value="FD304_504_704_EG"/> <input type="button" value="Choose File"/>
› Port Isolation Settings	<input type="button" value="Upgrade"/> <input type="button" value="Reset"/>
› OLT Adapt Settings	
› Loop Detect	
› Commit/Reboot	
› Multi-language Settings	
› Backup/Restore	
› Account Configuration	
› Firmware Upgrade	
› Time Zone	
› Logout	

9 ONU Interface Traffic Statistics

9.1 PON Statistics

Login ONU WEB. Click **Statistics** → **PON Statistics**. In here, we can view the information of transmitted and received packets of ONU PON port.

PON Statistics

Bytes Sent:	137472
Bytes Received:	0
Packets Sent:	848
Packets Received:	0
Unicast Packets Sent:	0
Unicast Packets Received:	0
Multicast Packets Sent:	744
Multicast Packets Received:	0
Broadcast Packets Sent:	104
Broadcast Packets Received:	0
FEC Errors:	0
HEC Errors:	0
Packets Dropped:	0
Pause Packets Sent:	0
Pause Packets Received:	0

9.2 ONU LAN Interface Traffic Statistics

Login ONU WEB. Click **Statistics** → **LAN Statistics**. In here, we can view the information of transmitted and received packets of ONU lan ports.

LAN Statistics

Interface	Received				Sent			
	Bytes	Packets	Errors	Dropped	Bytes	Packets	Errors	Dropped
LAN-1	525289	4225	0	0	4271228	6604	0	0
LAN-2	0	0	0	0	0	0	0	0
LAN-3	0	0	0	0	0	0	0	0
LAN-4	0	0	0	0	0	0	0	0

Refresh Reset Statistics