



AP201H GPON ONT

User Manual

Revision B

ACT 201H GPON ONT User Manual

ACT Document Number: ACT 201H GPON ONT

User Manual Revision B

Copyright © 2024 Ascent Communication Technology Limited.

All rights reserved. Reproduction in any manner whatsoever without the express written permission of Ascent Communication Technology is strictly forbidden.

This document is produced to assist professional and properly trained personnel with installation and maintenance issues for the product. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.

For more information, contact ACT: support@ascentcomtec.com



Revision History

Revision	Date	Reason for Change
A	1/2/2024	Draft
B	1/8/2024	Initial release

Contents

Chapter 1 Product Introduction.....	4
1.1 Product Description.....	4
1.2 Special Features	4
1.3 Technical Parameters	5
1.4 The use of Instructions	5
1.5 Panel Description	5
1.6 Indicator Description	5
1.7 PON Interface	6
Chapter 2 Quick Installation	7
2.1 Standard Packing Contents	7
2.2 Quick Installation.....	7
2.3 Unit Installation Adjustment	8
Chapter 3 Configuration	9
3.1 Login	9
3.2 Status.....	10
3.3 Network.....	12
3.4 Security.....	19
3.5 Application.....	211
3.6 Administration.....	233
3.7 HELP.....	29

Chapter 1 Product Introduction

1.1 Product Description

ACT AP201H terminal is a combination of XPON optical network unit. It adopts high-performance ONU chip and low-power optical receiving technology, which can meet the needs of home optical fiber to the home.



Figure 1: AP201H GPON ONT

1.2 Special Features

- Support port - based rate limitation and bandwidth control
- In compliant with IEEE802.3ah & ITU-T G.984 adaptive interface
- Up to 20KM transmission distance
- Support data encryption, group broadcasting, port Vlan separation, etc.
- Support Dynamic Bandwidth Allocation (DBA)
- Support ONU auto - discovery/Link detection/remote upgrade of software
- Support port mode of VLAN configuration
- Support power - off alarm function, easy for link problem detection
- Support broadcasting storm resistance function
- Support port loop detection
- Support ACL to configure data packet filter flexibly
- Support PPPoE/DHCP Server/IPTV/NAT
- Specialized design for system breakdown prevention to maintain stable system
- Support software online upgrading
- Support mac/port/url filter

1.3 Technical Parameters

Item	Description
Operating Temperature	0°C to 50°C
Storage Temperature	-40°C to 80°C
Operating Humidity	10 % to 85 %
Storage Humidity	10 % to 90 % (non-condensing)
Input Voltage	12V/0.5A
Power	<6W

Table 1: Technical Parameters

1.4 The use of Instructions

1.4.1 Product Feature and Model list

XPON Model	Feature
AP201	1GE+PON

Table 2: Product Features

1.4.2 Product Feature and Model list

This device should be connected by an external power adapter. First of all, connect the DC12V output cable of the adapter to the DC12V port of the device, and then plug n AC 220V power supply. When the panel PWR lights, the device is powered on

1.5 Panel Description

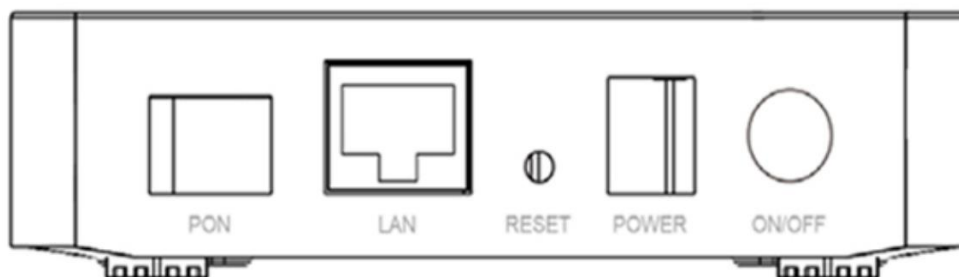


Figure 2: Panel Description

Interface / Button	Interface / button descriptions
PWR	DC 12V power input interface
PON	EPON/GPON/CATV fiber interface, SC/APC
GE	GE: 10/100/1000MBASE-TX

Table 3: Panel Description

1.6 Indicator Description

LED	Color	Status	Description
POWER	Green	On	The ONU is powered on properly.
		Off	The ONU is not powered on.
PON	Green	On	The ONU is connected to the OLT and is registered successfully
		Blink	The ONU is connected to the OLT but is not registered
		Off	The ONU is not connected to the OLT
LOS	Red	On	The ONU detects continuously transmitting optical signal.
		Blink	The ONU receives low optical

GE	Green	Off	power. The ONU receives optical power normally.
		On	The network interface is connected.
		Blink	The network port has data transmission
		Off	The network interface is not connected.

Table 4: Indicator Description

1.7 PON Interface

Parameter		Specification
Up Optical	Wavelength	1310nm
	Transmitting Range	0.5dBm to 5dBm
Down Optical	Wavelength	1490nm
	Receiving Range	-8dBm to -28dBm

Table 5: PON Interface

Precautions:

1. The device is an indoor one, should not be used in places susceptible to rain.
2. OPT input interface type is SC/APC.

Chapter 2 Quick Installation

2.1 Standard Packing Contents

When you receive our products, please check carefully to make sure that our products whether have some defects or not. If something wrong with shippings, please contact carrier; other damage or lack of some parts, please contact with dealer.

Contents	Description
ONU	1 pcs
Power Adapter	1 pcs
User Manual	1 pcs (Optional)
Cable	1 pcs

Table 9: Packing Contents

2.2 Quick Installation



Figure 3: Actual package content

- Connecting the optical fiber cable to the unit.
- Remove the protective cap of the optical fiber.
- Clean the end of the optical fiber with an optical fiber end cleaner.
- Remove the protective cap of the ONU optical interface (PON)
- Connect the fiber to the PON port on the unit.

Note: When measuring the optical power before connecting to the ONU, it is recommended to use a PON Inline Power Meter. The receiver optical power should be between -7dbm and -28 dbm by using 1490nm.

While connecting, please note:

- Keep the optical connector and the optical fiber clean.
- Make sure there are no tight bends in the fiber and that the bending diameter is greater than 6cm. Otherwise, the optical signal loss may be increased, to the extent that signal may

be unavailable.

- Cover all optic ports and connectors with protective cap to guard against dust and moisture when the fiber is not used.
- Apply power to the unit. If the product has the power button, please push the power button before used.
- After the ONU is power ON, Indicators should light up as for normal operation. Check whether the PON interface status LED (PON) is on continuously. If it is, the connection is normal; otherwise there is either problem of the physical connection or the optical level at either end. This may be caused by either too much or too little attenuation over the optical fiber. Please refer to the Panel Lights Description for normal LED activity.
- Check all signal levels and services on all the ONU communication ports.

2.3 Unit Installation Adjustment

Installing the ONU on a horizontal surface (Bench top)

Put the ONU on a clean, flat, sturdy bench top. You must keep the clearance for all sides of the unit to more than 10cm for heat dissipation.

Chapter 3 Configuration

After finishing the basic connection configuration, you can use its basic function. In order to satisfy service requirements, this chapter provides the user parameter modification and individual configuration description.

3.1 Login

The device is configured by the web interface. The following steps will enable you to login:

1. Conform “**2.2 Quick Installation**” to install;
2. The device management default IP address is **192.168.1.1**;
3. Open your web browser, type the device IP in address bar;
4. Entry of the user name and password will be prompted. Enter the default login user name and password.

By default, there are two user levels for management. Administration level user name is "superadmin", password is "superadmin". Normal user level user name is "admin", password is "ascent".

The Administration account is able to access and modify all settings of ONU. It also can modify user account's username and password.

The normal account can only be used to view configurations, status and configure few parameters.



Administrator

UserName

PassWord

Language English ▾

Login Reset

Figure 4: Login Interface

3.2 Status

This part shows the main information of device and the active status about major services.

3.2.1 Device Information

This page shows the basic information about device, such as Device Name, PON MAC information, Serial Number, Hardware Version information.

Status Network Security Application Administration Help	
Device Information	
Device Information	
Network Interface	
User Interface	

Model	G55
PON MAC	88:c9:b3:c0:6d:f6
Serial Number	88C9B3-HSTCB3C06DF6
Hardware Version	V1.0
Software Version	SFUSV1.2.1
Boot Loader Version	SFUSV1.2.1
Version Date	2023-08-24 10:16:05

Help Logout

Figure 5: Device Information

3.2.2 Network Interface

3.2.2.1 WAN Connection Information

This page shows WAN connection information you have configured.

Status Network Security Application Administration Help	
Device Information	
Network Interface	
WAN Connection	
PON Inform	
PON Alarm	
User Interface	

No connection available.

Help Logout

Refresh

Figure 6: IPV6 WLAN Information

3.2.2.2 PON Information

This page shows the PON information, including PON and GPON status.

Status

Network

Security

Application

Administration

Help

Device Information

Network Interface

WAN Connection

PON Inform

PON Alarm

User Interface

GPON State	Init State
Optical Module Input Power(dBm)	--
Optical Module Output Power(dBm)	--
Optical Module Supply Voltage(μV)	3338000
Optical Transmitter Bias Current(μA)	0
Operating Temperature of the Optical Module(°C)	33

Help

Logout

Refresh

Figure 7: PON Status

3.2.2.3 PON Alarm Information

This page shows the PON Alarm status.

Status

Network

Security

Application

Administration

Help

Device Information

Network Interface

WAN Connection

PON Inform

PON Alarm

User Interface

PonSymPerAlarm	0
PonFrameAlarm	0
PonFraPerAlarm	0
PonSecSumAlarm	0
PonDygasAlarm	0
PonLinkAlarm	0
PonCirEveAlarm	0

Help

Logout

Refresh

Figure 8: LAN Interface Information

3.2.2.4 User Interface

This page shows the register status of Ethernet Port1 attention, data send and receive information.

Status	Network	Security	Application	Administration	Help
<div>Device Information</div> <div>Network Interface</div> <div>User Interface</div> <div>Ethernet</div>					
Ethernet Port		LAN1			
Status		Up/1000Mbps/Full Duplex			
MAC Address		88:c9:b3:c0:6d:f6			
Bytes Received		689998			
Packets Received		6215			
Unicast Packets Received		4999			
Multicast Packets Received		1018			
Error Packets Received		0			
Discard Packets Received		0			
Bytes Sent		2560363			
Packets Sent		5423			
Unicast Packets Sent		5412			
Multicast Packets Sent		11			
Error Packets Sent		0			
Discard Packets Sent		0			
<div>Refresh</div>					

Figure 9: VoIP Information

3.3 Network

3.3.1 WAN Basic Information

3.3.1.1 WAN Connection Information

This page shows the WAN Connection including basic WAN Connection/PPP/IPV4 status.

Status	Network	Security	Application	Administration	Help
<div>WAN</div> <div>WAN Connection</div> <div>LAN</div> <div>Routing(IPv4)</div> <div>Port Configuration</div>					
Connection Name		Create WAN Conner			
New Connection Name					
Enable VLAN		<input type="checkbox"/>			
Type		Route			
Service List		INTERNET			
MTU		1492			
Link Type		PPP			
PPP		<div>Username</div> <div>Password</div> <div>DMS Name</div> <div>Authentication Type: Auto</div> <div>Connection Trigger: Always On</div>			
IP Version		IPv4			
PPP TransType		PPPoE			
IPv4		<div>Enable NAT <input checked="" type="checkbox"/></div>			
<div>Create</div> <div>Cancel</div>					

Figure 10: LAN Interface Settings

3.3.2 LAN Basic Information

3.3.2.1 DHCP Server

This page shows the LAN Interface information of DHCP basic server information.

Status	Network	Security	Application	Administration	Help										
<div> <div> WAN LAN DHCP Server RA Service DHCP Server(IPv6) Prefix Management Port Service(IPv6) Routing(IPv4) Port Configuration </div> <div> <p>NOTE: 1. The DHCP Start IP Address and DHCP End IP address should be in the same subnet as the LAN IP.</p> <p>LAN IP Address <input type="text" value="192.168.1.1"/></p> <p>Subnet Mask <input type="text" value="255.255.255.0"/></p> <p>Enable DHCP Server <input type="checkbox"/></p> <p>DHCP Start IP Address <input type="text" value="192.168.1.2"/></p> <p>DHCP End IP Address <input type="text" value="192.168.1.254"/></p> <p>Assign IspDNS <input type="checkbox"/></p> <p>DNS Server1 IP Address <input type="text" value="192.168.1.1"/></p> <p>DNS Server2 IP Address <input type="text"/></p> <p>DNS Server3 IP Address <input type="text"/></p> <p>Default Gateway <input type="text" value="192.168.1.1"/></p> <p>Lease Time <input type="text" value="86400"/> sec</p> <p>Allocated Address</p> <table border="1"> <thead> <tr> <th>MAC Address</th> <th>IP Address</th> <th>Remaining Lease Time</th> <th>Host Name</th> <th>Port</th> </tr> </thead> <tbody> <tr> <td colspan="5">There is no data.</td> </tr> </tbody> </table> </div> <div> <input type="button" value="Help"/> <input type="button" value="Logout"/> </div> </div>						MAC Address	IP Address	Remaining Lease Time	Host Name	Port	There is no data.				
MAC Address	IP Address	Remaining Lease Time	Host Name	Port											
There is no data.															
					<input type="button" value="Submit"/> <input type="button" value="Cancel"/>										

Figure 11: WLAN0 Basic Interface Information

3.3.2.2 RA Service Information

This page shows the WLAN Interface information of Maximum/Minimum wait time information.

Status	Network	Security	Application	Administration	Help
<div> <div> WAN LAN DHCP Server RA Service DHCP Server(IPv6) Prefix Management Port Service(IPv6) Routing(IPv4) Port Configuration </div> <div> <p>Minimum Wait Time <input type="text" value="198"/> (3 ~ 1350)</p> <p>Maximum Wait Time <input type="text" value="600"/> (4 ~ 1800)</p> <p>M <input type="checkbox"/></p> <p>O <input checked="" type="checkbox"/></p> </div> <div> <input type="button" value="Help"/> <input type="button" value="Logout"/> </div> </div> <div> <input type="button" value="Submit"/> <input type="button" value="Cancel"/> </div>					

Figure 12: RA Service Information

3.3.2.3 DHCP Server Information

This page shows the WLAN Interface information of Maximum/Minimum wait time information.

This page shows the LAN IP address/DNS Refresh time information.

Status	Network	Security	Application	Administration	Help						
<div> <div> WAN LAN DHCP Server RA Service DHCP Server(IPv6) Prefix Management Port Service(IPv6) Routing(IPv4) Port Configuration </div> <div> LAN IP Address <input type="text" value="fe80::1"/> / <input type="text" value="64"/> Enable DHCP Server <input checked="" type="checkbox"/> DNS Refresh Time <input type="text" value="86400"/> sec Allocated Address <table border="1"> <thead> <tr> <th>DUID</th> <th>IP Address</th> <th>Remaining Lease Time</th> </tr> </thead> <tbody> <tr> <td colspan="3">There is no data.</td> </tr> </tbody> </table> </div> <div> <input type="button" value="Submit"/> <input type="button" value="Help"/> <input type="button" value="Logout"/> <input type="button" value="Cancel"/> </div> </div>						DUID	IP Address	Remaining Lease Time	There is no data.		
DUID	IP Address	Remaining Lease Time									
There is no data.											

Figure 13: DHCP Server Information

3.3.2.4 Prefix Management

This page shows the WAN Connection information.

Status	Network	Security	Application	Administration	Help												
<div> <div> WAN LAN DHCP Server RA Service DHCP Server(IPv6) Prefix Management Port Service(IPv6) Routing(IPv4) Port Configuration </div> <div> WAN Connection <input type="text"/> Prefix Source <input type="text"/> Prefix <input type="text"/> / <input type="text"/> Preferred Lifetime <input type="text"/> sec Valid Lifetime <input type="text"/> sec Prefix Delegation <input type="checkbox"/> RA <input type="checkbox"/> DHCPv6 <table border="1"> <thead> <tr> <th>WAN Connection</th> <th>Prefix Source</th> <th>Prefix</th> <th>Preferred/Valid Lifetime</th> <th>Prefix Delegation</th> <th>Modify</th> </tr> </thead> <tbody> <tr> <td colspan="6">There is no data.</td> </tr> </tbody> </table> </div> <div> <input type="button" value="Submit"/> <input type="button" value="Help"/> <input type="button" value="Logout"/> <input type="button" value="Cancel"/> </div> </div>						WAN Connection	Prefix Source	Prefix	Preferred/Valid Lifetime	Prefix Delegation	Modify	There is no data.					
WAN Connection	Prefix Source	Prefix	Preferred/Valid Lifetime	Prefix Delegation	Modify												
There is no data.																	

Figure 14: Prefix Management

3.3.2.5 Port Service

This page shows the Port Service information.


Status	Network	Security	Application	Administration	Help
<div> <div> WAN LAN DHCP Server RA Service DHCP Server(IPv6) Prefix Management Port Service(IPv6) Routing(IPv4) Port Configuration </div> <div> <div>  <p>The IPv6 address assign service will be opened on the port which is checked. The Router Advertisement will be opened on the port which is checked.</p> </div> <div> LAN1 <input checked="" type="checkbox"/> DHCPv6 <input checked="" type="checkbox"/> RA </div> </div> <div> <input type="button" value="Help"/> <input type="button" value="Logout"/> </div> </div>					
<input type="button" value="Submit"/> <input type="button" value="Cancel"/>					

Figure 15: Port Service

3.3.2 Routing Information

3.3.2.1 Default Gateway

This page shows the Default Gateway information of WLAN Connection.

Status	Network	Security	Application	Administration	Help
<div> <div> WAN LAN Routing(IPv4) Default Gateway Static Routing Routing Table Port Configuration </div> <div> WAN Connection <input type="text"/> </div> <div> <input type="button" value="Help"/> <input type="button" value="Logout"/> </div> </div>					
<input type="button" value="Submit"/> <input type="button" value="Cancel"/>					

Figure 16: Default Gateway

3.3.2.2 Static Routing

This page shows the WAN Connection information.

Status

Network

Security

Application

Administration

Help

WAN

LAN

Routing(IPv4)

Default Gateway

Static Routing

Routing Table

Port Configuration

WAN Connection

Network Address

Subnet Mask

Gateway

Add

Network Address	Subnet Mask	Gateway	WAN Connection	Status	Modify	Delete
There is no data, please add one first.						

Help

Logout

Figure 17: Static Routing

3.3.2.3 Routing Table

This page shows the Routing Table information.

Status

Network

Security

Application

Administration

Help

WAN

LAN

Routing(IPv4)

Default Gateway

Static Routing

Routing Table

Port Configuration

Network Address	Subnet Mask	Gateway	Interface
1.0.0.0	255.255.255.255	116.244.13.64	LAN

Help

Logout

Refresh

Figure 18: Routing Table

3.3.3 Port Configuration

3.3.3.1 Mode

This page shows the port name and port mode.

Status	Network	Security	Application	Administration	Help
WAN	<div> <div>Port</div> <div>GE1</div> </div> <div> <div>Mode</div> <div>Auto</div> </div>				
LAN					
Routing(IPv4)					Help
Port Configuration					Logout
Mode					
Port Isolation					
Rate Limiting					
Flow Control					
MAC Configuration					

Submit

Cancel

Figure 19: Mode

3.3.3.2 Port Isolation

This page shows the port name and isolation status.

Status	Network	Security	Application	Administration	Help
WAN	<div> <div>Port</div> <div>GE1</div> </div> <div> <div>Isolate</div> <div><input type="checkbox"/></div> </div>				
LAN					
Routing(IPv4)					Help
Port Configuration					Logout
Mode					
Port Isolation					
Rate Limiting					
Flow Control					
MAC Configuration					

Submit

Cancel

Figure 20: Port Isolation

3.3.3.3 Port Isolation

This page shows the port name and rate limiting range.


Status	Network	Security	Application	Administration	Help
<div> <div> WAN LAN Routing(IPv4) Port Configuration <div> Mode Port Isolation Rate Limiting Flow Control MAC Configuration </div> </div> <div> <div>  Rate limiting value of "0", means no limit. </div> <div> Port <input type="text" value="GE1"/> <div> <div>Ingress Rate limiting <input type="text" value="1024000"/> kbps(0~1024000)</div> <div>DS Rate limiting <input type="text" value="1024000"/> kbps(0~1024000)</div> </div> </div> <div> <input type="button" value="Help"/> <input type="button" value="Logout"/> </div> </div> </div> <div> <input type="button" value="Submit"/> <input type="button" value="Cancel"/> </div>					

Figure 21: Rate Limiting

3.3.3.4 Flow Control

This page shows the port name and flow control status.

Status	Network	Security	Application	Administration	Help
<div> <div> WAN LAN Routing(IPv4) Port Configuration <div> Mode Port Isolation Rate Limiting Flow Control MAC Configuration </div> </div> <div> <div> Port <input type="text" value="GE1"/> <div> <div>Flow Control <input type="checkbox"/></div> </div> </div> <div> <input type="button" value="Help"/> <input type="button" value="Logout"/> </div> </div> </div> <div> <input type="button" value="Submit"/> <input type="button" value="Cancel"/> </div>					

Figure 22: Flow Control

3.3.3.5 MAC Configuration

This page shows the MAC configuration information.


Status	Network	Security	Application	Administration	Help
<div> <div> WAN LAN Routing(IPv4) Port Configuration Mode Port Isolation Rate Limiting Flow Control MAC Configuration </div> <div> MAC Aging Time <input type="text" value="60"/> secs Port <input type="text" value="GE1"/> Learning Limit <input type="text" value="4095"/> (0~4096)  Learning Limit value of "4096", means no limit. </div> <div> <input type="button" value="Help"/> <input type="button" value="Logout"/> </div> </div>					
					<input type="button" value="Submit"/> <input type="button" value="Cancel"/>

Figure 23: MAC Configuration

3.4 Security

3.4.1 Firewall

This page shows the Firewall configuration information.

Status	Network	Security	Application	Administration	Help
<div> <div> Firewall Firewall Service Control MAC Filter </div> <div> Enable Anti-Hacking Protection <input type="checkbox"/> Firewall Level <input type="radio"/> Off <input checked="" type="radio"/> Low <input type="radio"/> Middle <input type="radio"/> High <input type="radio"/> Custom >> </div> <div> <input type="button" value="Help"/> <input type="button" value="Logout"/> </div> </div>					
					<input type="button" value="Submit"/> <input type="button" value="Cancel"/>

Figure 24: Firewall

3.4.2 Service Control

This page shows the IP and service information.

Status

Network

Security

Application

Administration

Help

Firewall

Service Control

MAC Filter

IP Version

IPv4

Enable

☐

Ingress

Start Source IP Address

End Source IP Address

Mode

Discard

Service List

☐ HTTP
☐ TELNET

Add

Enable	Ingress	Start Source IP Address	End Source IP Address	Mode	Service List	Modify	Delete
✓	WAN			Discard	TELNET		
✓	WAN			Discard	HTTP		
✓	LAN			Permit	TELNET		

Help

Logout

Figure 25: Service Control

3.4.3 Mac Filter

This page shows the Mac configuration information.

Status

Network

Security

Application

Administration

Help

Firewall

Service Control

MAC Filter

1. If you choose the Permit mode, please add the MAC address of your PC first, otherwise internet access is not allowed.

2. Enable switching or Mode switching will take effect immediately.

Enable

☐

Mode

Discard

Type

Bridge

Protocol

IP

Source MAC Address

Destination MAC Address

Add

Type	Protocol	Source MAC Address	Destination MAC Address	Modify	Delete
There is no data, please add one first.					

Help

Logout

Figure 26: MAC Filter

3.5 Application

3.5.1 MultiCast

3.5.5.1 IGMP Mode

This page shows the IGMP Mode selection.

Figure 27: IGMP Mode

3.5.5.2 Basic Configuration

This page shows the Basic Configuration.

Figure 28: Basic Configuration

3.5.5.3 Maximum Address Configuration


This page shows the maximum number of addresses.

Status
Network
Security
Application
Administration
Help

MultiCast

IGMP Mode
Basic Configuration
Maximum Address Configuration

BPDU
Port Forwarding

 The Maximum Number of Addresses is 1024.

Port	Maximum Number of Addresses
LAN1	1024

Figure 29: Maximum Address Configuration

3.5.5.4 BPDU

This page shows BPDU forwarding enable status.

Status
Network
Security
Application
Administration
Help

MultiCast

BPDU
BPDU

Port Forwarding

Enable BPDU Forwarding ☒

Figure 30: BPDU

3.5.5.5 Port Forwarding

This page shows port forwarding configuration information.

Status

Network

Security

Application

Administration

Help

MultiCast

BPDU

Port Forwarding

Port Forwarding

Enable ☐

Name

Protocol TCP

WAN Host Start IP Address

WAN Host End IP Address

WAN Connection

WAN Start Port (1 ~ 65535)

WAN End Port (1 ~ 65535)

LAN Host IP Address

LAN Host Start Port (1 ~ 65535)

LAN Host End Port (1 ~ 65535)

Add

Help

Logout

Enable	Name	WAN Host Start IP Address	WAN Start Port	LAN Host Start Port	WAN Connection	Modify	Delete
	Protocol	WAN Host End IP Address	WAN End Port	LAN Host End Port	LAN Host Address		

There is no data, please add one first.

Figure 31: Port Forwarding

3.6 Administration

3.6.1 User Management.

This page shows administration user basic configuration information.

Status

Network

Security

Application

Administration

Help

User Management

User Management

Login Timeout

Device Management

Diagnosis

Loopback Detection

Led Control

User Privilege: ☒ Administrator ☐ User

Username

Old Password

New Password

Confirmed Password

Help

Logout

Submit

Cancel

Figure 32: User Management

3.6.2 Login Timeout

This page shows login timeout information.

Status	Network	Security	Application	Administration	Help
User Management					
Login Timeout					
Device Management					
Diagnosis					
Loopback Detection					
Led Control					

1.Any value between 1 minute and 30 minutes is allowed.
2.The changes of Timeout take effect after re-login.

Timeout minute(s)

Figure 33: Login Timeout

3.6.3 Device Management

3.6.3.1 System Management

This page shows reboot device and restore factory default settings operations.

Status	Network	Security	Application	Administration	Help
User Management					
Login Timeout					
Device Management					
System Management					
Software Upgrade					
User Configuration Management					
Diagnosis					
Loopback Detection					
Led Control					

Click this button to reboot the device.


Click this button to restore the configuration to factory default settings. The device will reboot after operating.

Figure 34: System Management

3.6.3.2 System Management

This page shows software upgrade operation.

Status	Network	Security	Application	Administration	Help
User Management					
Login Timeout					
Device Management					
System Management					
Software Upgrade					
User Configuration Management					
Diagnosis					
Loopback Detection					
Led Control					

 The device will reboot after upgrading.

Please select a new software/firmware image


Figure 35: Software Upgrade

3.6.3.3 User Configuration Management

This page shows user backup and restore configuration.

Status	Network	Security	Application	Administration	Help
User Management					
Login Timeout					
Device Management					
System Management					
Software Upgrade					
User Configuration Management					
Diagnosis					
Loopback Detection					
Led Control					

Backup user configuration file from the device

 The device will reboot after operating.

Please select a user configuration file

Figure 36: User Configuration Management

3.6.4 Diagnosis

3.6.4.1 Ping Diagnosis

This page shows Ping Diagnosis configuration.

The screenshot shows the 'Administration' tab selected in the top navigation bar. On the left sidebar, the 'Diagnosis' section is expanded, and 'Ping Diagnosis' is highlighted. The main content area contains a form with the following elements:

- IP Address or Host Name:** A text input field.
- Egress:** A dropdown menu.
- Buttons:** 'Help' and 'Logout' buttons are located on the right side of the form area.
- Footer:** 'Submit' and 'Cancel' buttons are located at the bottom right of the page.

Figure 37: Ping Diagnosis

3.6.4.2 Mirror Configuration

This page shows Mirror Configuration of source and destination.

The screenshot shows the 'Administration' tab selected in the top navigation bar. On the left sidebar, the 'Diagnosis' section is expanded, and 'Mirror Configuration' is highlighted. The main content area contains a form with the following elements:

- Warning Message:** A yellow warning icon and text: "Cannot configure the same rules, and a source port cannot correspond to multiple destination ports."
- Source:** A dropdown menu.
- Destination:** A dropdown menu with 'LAN1' selected.
- Add Button:** A button to add a new rule.
- Table:** A table with columns 'Source', 'Destination', and 'Delete'. The table is currently empty, with a message below it: "There is no data, please add one first."
- Buttons:** 'Help' and 'Logout' buttons are located on the right side of the form area.
- Footer:** A blue bar at the bottom of the page.

Figure 38: Mirror Configuration

3.6.5 Loopback Detection

3.6.5.1 Basic Configuration

This page shows loopback basic configuration.

Status	Network	Security	Application	Administration	Help
User Management					
Login Timeout					
Device Management					
Diagnosis					
Loopback Detection					
Basic Configuration					
Enable Configuration					
VLAN Configuration					
Led Control					

Destination MAC: ☒ Broadcast Address ☐ BPDU Address

Ethernet Type: (hex 0000 - ffff)

Send Interval: (100 - 1000) ms

Port Closing Time: (60 - 300)sec

Loopback Recovery Time: (5 - 300)sec

Figure 39: Basic Configuration

3.6.5.2 Enable Configuration

This page shows configuration enable data.

Status	Network	Security	Application	Administration	Help
User Management					
Login Timeout					
Device Management					
Diagnosis					
Loopback Detection					
Basic Configuration					
Enable Configuration					
VLAN Configuration					
Led Control					

Port	Loopback Enable	Alarm Enable	Portdislooped Enable
LAN1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 40: Enable Configuration

3.6.5.3 VLAN Configuration

This page shows vlan configuration data.

Status	Network	Security	Application	Administration	Help
User Management					
Login Timeout					
Device Management					
Diagnosis					
Loopback Detection					
Basic Configuration					
Enable Configuration					
VLAN Configuration					
Led Control					

Port

VLAN (1 - 4094)

Port	VLAN	Modify	Delete
There is no data, please add one first.			

Figure 41: VLAN Configuration

3.6.6 Led Control

This page shows led control operation.

Status	Network	Security	Application	Administration	Help
User Management					
Login Timeout					
Device Management					
Diagnosis					
Loopback Detection					
Led Control					
Led Control					

Turn Off Leds ☐

Figure 42: Led Control

3.7 HELP

This page shows Help page.

Status

Network

Security

Application

Administration

Help

Help

Status

Network

Security

Application

Administration

Help

Help

Logout

Status

Device Information

Network Interface

User Interface

Network

WAN

LAN

Device Information

Display primary information of this device: model name, serial number, soft version, boot version, etc.

[\[Top\]](#)

Network Interface

WAN Connection

This page displays basic information of WAN connection.

[\[Top\]](#)

PON Inform

Show PON state, PON port input power (dBm), PON port output power (dBm), optical module supply voltage (uV), optical transmitter bias current (uA), optical modules Operating temperature (in degrees) and other information.

[\[Top\]](#)

PON Alarm

Display equipment alarm, service quality alarm, error alarm, communication alarm, environmental alarm and other information.

[\[Top\]](#)

Ethernet

Display the Ethernet port information, including port name, link status, packets/bytes received, packets/bytes sent, etc.

[\[Top\]](#)

WAN

WAN Connection

Ethernet broadband settings:

1. IPv4 correlative: Connection Mode, including Routing and Bridge. Routing, including PPPoE(please select it to get IP address dynamically if your ISP uses PPPoE)/ DHCP(get IP address dynamically from your ISP)/ Static(set static IP address), etc. Bridge mode is transparent bridge(communication between different networks like in the same physical LAN). Some other basic options: VLAN, etc.

2. IPv6 correlative: Manual mode, manually specify GUA,

DHCP Server

1.Supporting the management of the Home Gateway IP address

2.Dynamic Address management, including Dynamic Address distribution, and parameters distributed to equipment, such as lease time, address range, DNS, etc.

[\[Top\]](#)

RA Service

Router Advertisement(RA) is called stateless address autoconfiguration, it can periodically send many information include MTU, prefix, DNS and hop limit. The period in random i between mintime and maxtime. Managed address configuration(M) flag, when set, hosts use the DHCPv6 protocol for address auto configuration. Other stateful configuration(O) flag, When set, hosts use the DHCPv6 protocol for auto configuration of other (non-address) information.

[\[Top\]](#)

DHCP Server(IPv6)

1.Supporting the management of the Home Gateway IPv6 address and its prefix length.
2.IPv6 Dynamic Address management: IP Address: configure the IPv6 address and prefix length of the gateway. Enable DHCP Service: enable/disable DHCPv6 service function. DNS Refresh Time: configure the DNS refresh time distributed to client. Distributed Address List: DUID: DUID of client, identifies one client uniquely. IP Address, IPv6 address distributed to client. Residual Rent Time: the residual rent time of IPv6 address distributed to client.

[\[Top\]](#)

Prefix Management

This page is used to display and modify the prefix information. The prefix can be obtained automatically, or configured manually. And the information is not allowed to be modified when prefix source is None.

[\[Top\]](#)

Port Service(IPv6)

DHCPv6 or RA service will be enabled on the port when DHCPv6 or RA is checked.

[\[Top\]](#)

Routing(IPv4)

Default Gateway

Default Route Interface Configuration: specify a WAN connection as the default one for routing.

[\[Top\]](#)

Static Routing

Static Routing Configuration:select a WAN connection as the Route Interface, then configure destination IP, Mask, Gateway.

Routing Table

Route Information View, such as Network Address, Subnet Mask, Gateway, Interface Information.

[\[Top\]](#)

Port Configuration

Mode

Set the mode of the port.

[\[Top\]](#)

Port Isolation

Set port isolation.

[\[Top\]](#)

Rate Limiting

Set the speed limit for the port.

[\[Top\]](#)

Flow Control

Set the port flow control.

[\[Top\]](#)

MAC Configuration

Set the aging time of port MAC address and the number of learning addresses.

[\[Top\]](#)

MAC Filter

MAC Filter

MAC Address Filter: The MAC Address Filter settings can set the relevance parameters of the MAC filter function. The user interface will display the set MAC Filter rules after setting completed.

[\[Top\]](#)

Application

MultiCast

IGMP Mode

Enable IGMP Proxy, IGMP Snooping, IGMP Custom and configure some other parameters.

-----[\[Top\]](#)

Basic Configuration

Set the Aging Time and Leave Mode for MultiCast Module.

-----[\[Top\]](#)

Maximum Address Configuration

The Maximum Number of Addresses can be set to different port, and the user interface will display the new Configuration.

-----[\[Top\]](#)

BPDU

BPDU

Configuring to control BPDU data frames. If BPDU Forwarding is enabled, BPDU data frames will be replied, otherwise those will be processed in device.

-----[\[Top\]](#)

Port Forwarding

Port Forwarding

Users can use the application name to set a virtual server. If you enable virtual server configuration, you can use Wide Area Network to access the virtual host.

-----[\[Top\]](#)

Administration

User Management

User Management

Maintaining the WEB users accounts information of the device.

-----[\[Top\]](#)

Login Timeout

Login Timeout

Login timeout configuration.

-----[\[Top\]](#)

Device Management

System Management

Reboot or restore default if needed.

-----[\[Top\]](#)

Software Upgrade

Upgrade software version by the operation.

-----[\[Top\]](#)

User Configuration Management

Export User Configuration: export user configuration file from device.

Import User Configuration: import specified user configuration file to device.

-----[\[Top\]](#)

Diagnosis

Ping Diagnosis

This page is used for diagnosing the network connectivity from this device to the specified IP address or host name.

-----[\[Top\]](#)

Mirror Configuration

Mirror configure, which is used to send mirror data of WAN connection to LAN, then developers or maintenance personnel can analyze caught packets.

-----[\[Top\]](#)

Loopback Detection

Basic Configuration

This page is used to configure the loopback global configuration. Port Closing Time is the port shut down time when loopback detected; Loopback Recovery Time is used to determine if loopback disappears. If the period of this time has not received detection packets, namely, that the loop disappears.

-----[\[Top\]](#)

Enable Configuration

This page is used to configure the loopback enable configuration. Loopback Enable is used to control whether to detect loopback; Alarm Enable is used to control whether to report alarm when detected loopback; Portdislooped Enable is used to control whether to shut down the port when detected loopback.

-----[\[Top\]](#)

VLAN Configuration

This page is used to configure the VLAN for detection packets, distinguish between the ports.

-----[\[Top\]](#)

Led Control

Led Control

can control the leds on the ONU.

-----[\[Top\]](#)

Help

Help

Help

Help to learn the function and how to use this device.

-----[\[Top\]](#)

Figure 43: Help



Ascent Communication Technology Ltd

AUSTRALIA

140 William Street, Melbourne
Victoria 3000, AUSTRALIA
Phone: +61-3-8691 2902

HONG KONG SAR

Unit 9, 12th Floor, Wing Tuck Commercial Centre
177 Wing Lok Street, Sheung Wan, HONG KONG
Phone: +852-2851 4722

CHINA

Unit 1933, 600 Luban Road
200023, Shanghai CHINA
Phone: +86-21-60232616

USA

2710 Thomes Ave
Cheyenne, WY 82001, USA
Phone: +1-203 816 5188

EUROPE

Pfarrer-Bensheimer-Strasse 7a
55129 Mainz, GERMANY
Phone: +49 (0) 6136 926 3246

VIETNAM

15 /F TTC Building, Duy Tan Street
Cau Giay Dist., Hanoi, VIETNAM
Phone: +84 243 795 5917

WEB: www.ascentcomtec.com

EMAIL: sales@ascentcomtec.com

Specifications and product availability are subject to change without notice.
Copyright © 2024 Ascent Communication Technology Limited. All rights reserved.
Ver. ACT_AP201H_GPON_ONT_Manual_V1b_Apr_2019