



AP214H GPON ONT

User Manual

Revision D

ACT 214H GPON HGU ONT User Manual

ACT Document Number: ACT 214H GPON HGU ONT

User Manual Revision D

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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	12/17/2018	Initial release
B	01/07/2019	Updated pictures
C	04/09/2019	Minor updates
D	12/26/2023	Updated Chapter1 sub chapters

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Chapter 1 Product Introduction

1.1 Product Description

ACT AP214H GPON ONT is series terminals are a combination of optical network units, WIFI, CATV, POTS and USB, Adopting high-performance ONU chips and low-power optical receiving technology can meet the needs of home optical fiber to the home.



Figure 1: AP214H GPON ONT

1.2 Special Features

- Support EPON&GPON mode adaptive
- Support GPON WAN port with 1.244Gbps uplink / 2.488Gbps downlink link
- Support 4x 10/100/1000BASE-T Ethernet RJ45 Ports
- Support 1x POTS
- Support 2x USB
- Support 802.11b/g/n speed up to 300Mbps
- Support 802.11a/b/g/n/ac speed up to 867Mbps

1.3 Technical Parameters

Item	Description
PON Interface	1 G/EPON port (EPON PX20+ and GPON Class B+) Receiving Sensitivity: ≤ -27 dBm Transmitting Optical Power: 0 dBm to +4 dBm Transmission Distance: 20 km
Wavelength	TX: 1310 nm, RX: 1490 nm
Optical Interface	SC/UPC Connector (SC/APC Connector for CATV) 1 FXS, RJ11 connectors Support: G.711/G.723/G.726/G.729 codec Support: T.30/T.38/G.711 Fax mode, DTMF Relay
POTS Interface	Line testing according to GR-909
LAN Interface	LAN port for GE and FE automatic adaptive mode. Full/Half, RJ45 connector
CATV Interface	RF, optical power: +2 to -18dBm Optical Reflection Loss: ≥ 45 Db Optical Receiving Wavelength: 1550 ± 10 nm RF Frequency Range: 47 to 1000MHz, RF Output Impedance: 75Ω RF output level: 78dB μ V AGC range: 0 to -15dBm MER: ≥ 32 dB@-15dBm
Wireless	Compliant with IEEE802.11b/g/n, Operating Frequency: 2.400-2.4835GHz Support MIMO, Rate up to 300Mbps, 2T2R, 2 external antenna 5dBi, Support: multiple SSID Channel: Auto Modulation Type: DSSS, CCK and OFDM Encoding Scheme: BPSK, QPSK, 16QAM and 64QAM
Push-Button	3, For Function of Reset, WLAN, WP Temperature: 0 °C to +50 °C
Operating Condition	Humidity: 10 % to 90 % (non-condensing) Temperature: -30 °C to +60 °C
Storing Condition	Humidity: 10 % to 90 % (non-condensing)
Power Supply	DC 12V/1A
Power Consumption	≤ 6 W
Dimension	155mm×92mm×34mm(L×W×H)
Net Weight	≤ 0.24 Kg

Table 1: Technical Parameters

1.4 The use of Instructions

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

1.4.1 Product Feature and Model list

XPON Model	Feature
AP214HC	4G+1POTS+2.4G&5G WIFI+CATV+XPON+USB
AP214H	4G+1POTS+2.4G&5G WIFI+XPON+USB

Table 2: Product Features

1.5 Panel Description

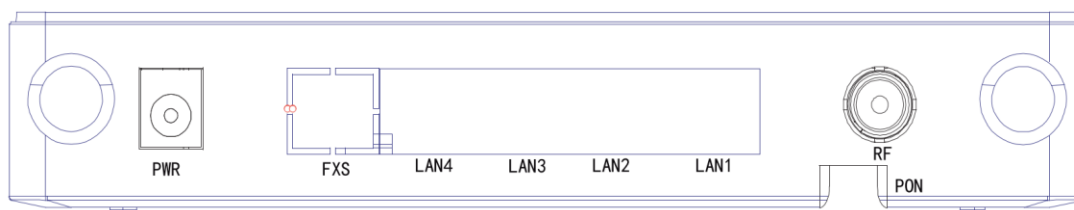


Figure 2: Panel Description

Interface / Button	Interface / button descriptions
PWR	DC 12V power input interface
PON	EPON/GPON/CATV fiber interface, SC/APC
LAN1 to LAN4	10/100/1000Mbps Adaptive ethernet interface
USB1/USB2	USB2.0 interface
RST	Reset and restore factory configuration
WLAN	Enable and disable WIFI function
RF	CATV RF output interface
FXS	POTS interface, RJ11 connector

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 power.
		Off	The ONU receives optical power normally.
LAN1/LAN4	Green	On	The network interface is

USB1/USB2 Green			connected.
		Blink	The network port has data transmission
		Off	The device system runs abnormally.
		On	USB port has been connected and works in host mode, but there is no data transmission.
2.4G Green		Blink	With traffic flow transmission
		Off	No power on or USB port not connected
		On	Indicates that the WIFI function opens.
		Blink	Indicates that the WIFI Data is being transmitted.
5G Green		Off	Indicates that the device is powered off or the WIFI function is disabled
		On	Indicates that the WIFI function opens.
		Blink	Indicates that the WIFI Data is being transmitted
		Off	Indicates that the device is powered off or the WIFI function is disabled.
CATV Green		On	Indicates that the CATV receives normal optical power.
		Off	Indicates that the CATV receives low optical power.
FXS Green		On	Indicates that the soft switch has been successfully registered, Input optical power is but there is no traffic now.
		Blink	Indicates that there is traffic flow transmission
		Off	Indicates that the system is not powered on or cannot register with the soft switch

Table 4: Indicator Description

1.7 WiFi Features

2.4G/5.8G Parameter

Standard

Specification

IEEE 802.11 b/g/n @ 2.4G Operating frequency: 2.400GHz to 2.4835GHz

IEEE 802.11 ac/a/m @ 5.8G Operating frequency: 5.150GHz to 5.825GHz

Antenna

2* 5dBi Antennas

Date Rate

2.4G 2*2 MIMO, rate up to 300Mbps; 5.8G 2*2 MIMO, rate up to 867Mbps

Table 5: WiFi Features

1.8 PON Interface

Parameter	Specification
Wavelength	Transmitting end: 1310 +/- 20nm Receiving end: 1490 +/- 10nm
PON Interface Standard	GPON: ITU-TG.984.x, Class B+
Output Optical Power	0.5dBm to 5dBm
Optical Receiver Sensitivity	-8dBm to -28dBm

Table 6: PON Interface

1.9 POTS Interface

Parameter	Specification
Standard	Support: G.711/G.723/G.726/G.729 codec Support: T.30/T.38/G.711 Fax mode, DTMF Relay Line testing according to GR-909

Table 7: POTS Interface

2.0 CATV Features

Parameter	Specification
Wavelength	1550 +/- 10nm
Optical Receiving Range	0dBm to -18dBm
Frequency Range	47MHz to 1000MHz
RF Output Level	>70dBu(-5dBm to -15dBm)
RF Output impedance	75ohm
MER	>32dB(-9dBm)

Table 8: CATV Features

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 charter provides the user parameter modification and individuation 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". Normaluser 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, LAN configuration information, IPv4 WAN connection information you have configured.

[Logout](#)
Firmware ver. V3.3.103

Status
LAN
WLAN
Diagnostics
Admin
Statistics

Status

> Device

> IPv6

> PON

> LAN Port

> VoIP

Device Status

This page shows the current status and some basic settings of the device.

System

Device Name	G8301
Uptime	2 min
Hardware Version	Ver.A
Firmware Version	V3.3.103
CPU Usage	1%
Memory Usage	35%

LAN Configuration

IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled
MAC Address	04F0E400D0F8

IPv4 WAN Configuration

Interface	VLAN ID	Connection Type	Protocol	IP Address	Gateway	Name Servers	Status
nas0_0	0	INTERNET	Bridged				down

[Refresh](#)

Figure 5: Device Information

3.2.2 Network Info

3.2.2.1 IPv6 WAN Connection Information

This page shows IPv6 WAN connection information you have configured.

[Logout](#)
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Status
LAN
WLAN
Diagnostics
Admin
Statistics

Status

> Device

> IPv6

> PON

> LAN Port

> VoIP

IPv6 Status

This page shows the current system status of IPv6.

LAN Configuration

IPv6 Address	
IPv6 Link-Local Address	fe80::6f0:e4ff:fe00:d0f8/64

Prefix Delegation

Prefix	
--------	--

WAN Configuration

Interface	VLAN ID	Connection Type	Protocol	IP Address	Status
nas0_0	0	INTERNET	Bridged		down

Route Configuration

Destination IP	Source	Gateway	Metric	Interface
fe80::/64	::/0	::	1024	br0
fe80::/64	::/0	::	256	br0

DS-Lite Configuration

Interface	AFTR name	AFTR address	DS-Lite DHCPv6 option

[Refresh](#)

Figure 6: IPV6 WLAN Information

3.2.2.2 PON Information

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

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
---------------	-----	------	-------------	-------	------------

Status

- > Device
- > IPv6
- > **PON**
- > LAN Port
- > VoIP

PON Status

This page shows the current system status of PON.

PON Status	
Vendor Name	HWTC
Temperature	18.859375 C
Voltage	3.291600 V
Tx Power	No signal
Rx Power	No signal
Bias Current	0.000000 mA

GPON Status	
ONU State	O1
ONU ID(Alloc ID)	0
LOID Auth Status	Initial Status

[Refresh](#)

Figure 7: PON Status

3.2.2.3 LAN Interface Information

This page shows the Ethernet port information of LAN port status.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
---------------	-----	------	-------------	-------	------------

Status

- > Device
- > IPv6
- > PON
- > **LAN Port**
- > VoIP

LAN Port Status

This page shows the current LAN Port status.

LAN Port Status	
LAN1	not-connected
LAN2	not-connected
LAN3	Up, 1000Mb, Full
LAN4	not-connected

[Refresh](#)

Figure 8: LAN Interface Information

3.2.2.4 VoIP Information

This page shows the register status of Port1 attention, you need to configure the part of VoIP Configuration. Otherwise, it couldn't be registered.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
---------------	-----	------	-------------	-------	------------

Status

- > Device
- > IPv6
- > PON
- > LAN Port
- > VoIP

VoIP Register Status

This page shows the register status of port

Register Status		
Port	Number	Status
1		Disabled

[Refresh](#)

Figure 9: VoIP Information

3.3 LAN Interface Settings

This page shows the LAN Interface settings including basic LAN settings and LAN ports status.

[Logout](#)
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Status	LAN	WLAN	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="192.168.1.1"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>
IPv6 Link-Local Address Mode:	<input type="text" value="Auto"/>
IPv6 DNS Mode:	<input type="text" value="HGWPProxy"/>
Prefix Mode:	<input type="text" value="WANDelegated"/>
WAN Interface:	<input type="text" value=""/>

IGMP Snooping:	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled
Ethernet to Wireless Blocking:	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled

LAN1:	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled
LAN2:	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled
LAN3:	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled
LAN4:	<input type="radio"/> Disabled <input checked="" type="radio"/> Enabled

[Apply Changes](#)

Figure 10: LAN Interface Settings

3.4 WLAN Interface Settings

3.4.1 WLAN0 Basic Information

This page shows the WLAN Interface information of WLAN0 (5GHz) basic information.

[Logout](#)
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Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

- > Basic Settings
- > Advanced Settings
- > Security
- > Access Control
- > Site Survey
- > WPS
- > Status

wlan1 (2.4GHz)

Easy Mesh

WLAN Basic Settings

This page is used to configure the parameters for WLAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.

☐ Disable WLAN Interface

Band: 5 GHz (A+N+AC)

Mode: AP Multiple AP

SSID: HS-5G-00d0R8

Channel Width: 80MHz

Control Sideband: Upper

Channel Number: Auto(DFS)

Radio Power (%): 100%

TX restrict: 0 Mbps (0.no restrict)

RX restrict: 0 Mbps (0.no restrict)

Associated Clients: Show Active WLAN Clients

☐ Enable Universal Repeater Mode (Acting as AP and client simultaneously)

SSID of Extended Interface: repeater_ssid1

Regdomain: FCC(1)

Apply Changes

Figure 11: WLAN0 Basic Interface Information

3.4.2 WLAN0 Advanced Information

This page shows the WLAN Interface information of WLAN0 (5GHz) advanced information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

- > Basic Settings
- > Advanced Settings
- > Security
- > Access Control
- > Site Survey
- > WPS
- > Status

wlan1 (2.4GHz)

Easy Mesh

WLAN Advanced Settings

These settings are only for more technically advanced users who have a sufficient knowledge about WLAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.

Fragment Threshold: 2346 (256-2346)

RTS Threshold: 2347 (0-2347)

Beacon Interval: 100 (100-1024 ms)

DTIM Period: 1 (1-255)

Data Rate: Auto

Preamble Type: ☒ Long Preamble ☐ Short Preamble

Broadcast SSID: ☒ Enabled ☐ Disabled

Client Isolation: ☐ Enabled ☒ Disabled

Protection: ☐ Enabled ☒ Disabled

Aggregation: ☒ Enabled ☐ Disabled

Short GI: ☒ Enabled ☐ Disabled

TX beamforming: ☐ Enabled ☒ Disabled

Multicast to Unicast: ☒ Enabled ☐ Disabled

Band Steering: ☐ Enabled ☒ Disabled Prefer 5GHz

WMM Support: ☒ Enabled ☐ Disabled

802.11k Support: ☐ Enabled ☒ Disabled

Apply Changes

Figure 12: WLAN0 Advanced Interface Information

3.4.3 WLAN0 Security Information

This page shows the WLAN Interface information of WLAN0 (5GHz) security information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	-------------	-------------	-------	------------

wlan0 (5GHz)

- > Basic Settings
- > Advanced Settings
- > **Security**
- > Access Control
- > Site Survey
- > WPS
- > Status

wlan1 (2.4GHz)
Easy Mesh

WLAN Security Settings

This page allows you setup the WLAN security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID Type:	Root AP - HS-5G-00d0f8 ▼
Encryption:	WPA2 Mixed ▼
WPA Cipher Suite:	<input checked="" type="checkbox"/> TKIP <input checked="" type="checkbox"/> AES
WPA2 Cipher Suite:	<input checked="" type="checkbox"/> TKIP <input checked="" type="checkbox"/> AES
Group Key Update Timer:	86400
Pre-Shared Key Format:	Passphrase ▼
Pre-Shared Key:	***** <input type="checkbox"/> Show Password

Apply Changes

Figure 13: WLAN0 Security Information

3.4.4 WLAN0 Access Control

This page shows the WLAN Interface information of WLAN0 (5GHz) access control information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	-------------	-------------	-------	------------

wlan0 (5GHz)

- > Basic Settings
- > Advanced Settings
- > Security
- > **Access Control**
- > Site Survey
- > WPS
- > Status

wlan1 (2.4GHz)
Easy Mesh

WLAN Access Control

If you choose 'Allowed Listed', only those WLAN clients whose MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these WLAN clients on the list will not be able to connect the Access Point.

Mode:	Disabled ▼	Apply Changes
-------	------------	----------------------

MAC Address:	<input type="text"/> (ex. 00E086710502)
--------------	---

Add **Reset**

Current Access Control List	
MAC Address	Select

Delete Selected **Delete All**

Figure 14: WLAN0 Access Control Information

3.4.5 WLAN0 Site Survey

This page shows the WLAN Interface information of WLAN0 (5GHz) site survey information.

[Logout](#)
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Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

- > Basic Settings
- > Advanced Settings
- > Security
- > Access Control
- > Site Survey
- > WPS
- > Status

wlan1 (2.4GHz)

Easy Mesh

WLAN Site Survey

This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually when client mode is enabled.

SSID	BSSID	Channel	Type	Encryption	Signal(%)
<div style="display: flex; justify-content: space-between;"> Refresh Next Step </div>					

Figure 15: WLAN0 Site Survey Information

3.4.6 WLAN0 WPS

This page shows the WLAN Interface information of WLAN0 (5GHz) WiFi Protected Setup information.

[Logout](#)
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Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

- > Basic Settings
- > Advanced Settings
- > Security
- > Access Control
- > Site Survey
- > WPS
- > Status

wlan1 (2.4GHz)

Easy Mesh

Wi-Fi Protected Setup

This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your WLAN client automatically synchronize its setting and connect to the Access Point in a minute without any hassle.

☐ Disable WPS

WPS Status:

☒ Configured
 ☐ UnConfigured

Auto-lock-down state:

Unlocked
 Unlock

Self-PIN Number:

Regenerate PIN

Push Button Configuration:

Start PBC

Apply Changes
Reset

Current Key Info

Authentication	Encryption	Key
WPA2-Mixed PSK	TKIP+AES	12345678

Client PIN Number:

Start PIN

Figure 16: WLAN0 WiFi Protected Setup Information

3.4.7 WLAN0 Status

This page shows the WLAN Interface information of WLAN0 (5GHz) status information.

[Logout](#)

Firmware ver. V3.3.103

Status

LAN

WLAN

Diagnostics

Admin

Statistics

WLAN0 (5GHz)

Basic Settings

Advanced Settings

Security

Access Control

Site Survey

WPS

Status

WLAN1 (2.4GHz)

Easy Mesh

WLAN Status

This page shows the WLAN current status.

WLAN Configuration	
Mode	AP
Band	5 GHz (A+N+AC)
SSID	HS-5G-00d0f8
Channel Number	100
Encryption	WPA2 Mixed
BSSID	82:10:e4:00:d0:19
Associated Clients	0

Figure 17: WLAN0 Status Information

3.4.8 WLAN1 Basic Information

This page shows the WLAN Interface information of WLAN1 (2.4GHz) basic information.

[Logout](#)

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Status

LAN

WLAN

Diagnostics

Admin

Statistics

WLAN0 (5GHz)

WLAN1 (2.4GHz)

Basic Settings

Advanced Settings

Security

Access Control

Site Survey

WPS

Status

Easy Mesh

WLAN Basic Settings

This page is used to configure the parameters for WLAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.

☐ Disable WLAN Interface

Band:

2.4 GHz (B+G+N)

Mode:

AP

Multiple AP

SSID:

HS-2.4G-00d0f8

Channel Width:

20/40MHz

Control Sideband:

Upper

Channel Number:

Auto

Radio Power (%):

100%

TX restrict:

0

Mbps (0:no restrict)

RX restrict:

0

Mbps (0:no restrict)

Associated Clients:

Show Active WLAN Clients

☐ Enable Universal Repeater Mode (Acting as AP and client simultaneously)

SSID of Extended Interface:

repeater_ssid2

Regdomain:

FCC(1)

Apply Changes

Figure 18: WLAN1 Basic Interface Information

3.4.9 WLAN1 Advanced Information

This page shows the WLAN Interface information of WLAN1 (2.4GHz) advanced information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

wlan1 (2.4GHz)

> Basic Settings

> **Advanced Settings**

> Security

> Access Control

> Site Survey

> WPS

> Status

Easy Mesh

WLAN Advanced Settings

These settings are only for more technically advanced users who have a sufficient knowledge about WLAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.

Fragment Threshold:	<input type="text" value="2346"/>	(256-2346)
RTS Threshold:	<input type="text" value="2347"/>	(0-2347)
Beacon Interval:	<input type="text" value="100"/>	(100-1024 ms)
DTIM Period:	<input type="text" value="1"/>	(1-255)
Data Rate:	<input type="button" value="Auto"/>	
Preamble Type:	<input checked="" type="radio"/> Long Preamble <input type="radio"/> Short Preamble	
Broadcast SSID:	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Client Isolation:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	
Protection:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	
Aggregation:	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Short GI:	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
TX beamforming:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	
Multicast to Unicast:	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
Band Steering:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled <input type="button" value="Prefer 5GHz"/>	
WMM Support:	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	
802.11k Support:	<input type="radio"/> Enabled <input checked="" type="radio"/> Disabled	

Apply Changes

Figure 19: WLAN1 Advanced Interface Information

3.4.10 WLAN1 Security Information

This page shows the WLAN Interface information of WLAN1 (2.4GHz) security information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

wlan1 (2.4GHz)

> Basic Settings

> Advanced Settings

> **Security**

> Access Control

> Site Survey

> WPS

> Status

Easy Mesh

WLAN Security Settings

This page allows you setup the WLAN security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

SSID Type:	<input type="button" value="Root AP - HS-2.4G-00d0f8"/>	
Encryption:	<input type="button" value="WPA2 Mixed"/>	
WPA Cipher Suite:	<input checked="" type="checkbox"/> TKIP <input checked="" type="checkbox"/> AES	
WPA2 Cipher Suite:	<input checked="" type="checkbox"/> TKIP <input checked="" type="checkbox"/> AES	
Group Key Update Timer:	<input type="text" value="86400"/>	
Pre-Shared Key Format:	<input type="button" value="Passphrase"/>	
Pre-Shared Key:	<input type="text" value="*****"/>	<input type="checkbox"/> Show Password

Apply Changes

Figure 20: WLAN1 Security Information

3.4.11 WLAN1 Access Control

This page shows the WLAN Interface information of WLAN1 (2.4GHz) access control information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

wlan1 (2.4GHz)

> Basic Settings

> Advanced Settings

> Security

> Access Control

> Site Survey

> WPS

> Status

Easy Mesh

WLAN Access Control

If you choose 'Allowed Listed', only those WLAN clients whose MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these WLAN clients on the list will not be able to connect the Access Point.

Mode:

Disabled ▼

Apply Changes

MAC Address:

(ex. 00E086710502)

Add

Reset

Current Access Control List

MAC Address	Select

Delete Selected

Delete All

Figure 21: WLAN1 Access Control Information

3.4.12 WLAN1 Site Survey

This page shows the WLAN Interface information of WLAN1 (2.4GHz) site survey information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

wlan1 (2.4GHz)

> Basic Settings

> Advanced Settings

> Security

> Access Control

> Site Survey

> WPS

> Status

Easy Mesh

WLAN Site Survey

This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually when client mode is enabled.

SSID	BSSID	Channel	Type	Encryption	Signal(%)

Refresh

Next Step

Figure 22: WLAN1 Site Survey Information

3.4.13 WLAN1 WPS

This page shows the WLAN Interface information of WLAN1 (2.4GHz) WiFi Protected Setup information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

wlan1 (2.4GHz)

> Basic Settings

> Advanced Settings

> Security

> Access Control

> Site Survey

> WPS

> Status

Easy Mesh

Wi-Fi Protected Setup

This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your WLAN client automatically synchronize its setting and connect to the Access Point in a minute without any hassle.

☐ Disable WPS

WPS Status:

☒ Configured
 ☐ UnConfigured

Auto-lock-down state:

Unlocked
 Unlock

Self-PIN Number:

Regenerate PIN

Push Button Configuration:

Start PBC

Apply Changes

Reset

Current Key Info

Authentication	Encryption	Key
WPA2-Mixed PSK	TKIP+AES	12345678

Client PIN Number:

Start PIN

Figure 23: WLAN1 WiFi Protected Setup Information

3.4.14 WLAN1 Status

This page shows the WLAN Interface information of WLAN1 (2.4GHz) status information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

wlan0 (5GHz)

wlan1 (2.4GHz)

> Basic Settings

> Advanced Settings

> Security

> Access Control

> Site Survey

> WPS

> Status

Easy Mesh

WLAN Status

This page shows the WLAN current status.

WLAN Configuration

Mode	AP
Band	2.4 GHz (B+G+N)
SSID	HS-2.4G-00d0f8
Channel Number	7
Encryption	WPA2 Mixed
BSSID	8a:10:e4:00:d0:fa
Associated Clients	0

Figure 24: WLAN1 Status Information

3.4.15 Easy Mesh

This page shows the WLAN Interface information of Easy Mesh interface setup.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	-------------	-------------	-------	------------

wlan0 (5GHz)

wlan1 (2.4GHz)

Easy Mesh

> EasyMesh Interface Setup

EasyMesh Interface Setup

This page is used to configure the parameters for EasyMesh feature of your Access Point.

Device Name:

Role:

☐ Controller
 ☒ Disabled

Apply Changes

Reset

Figure 25: Easy Mesh Information

3.5 Diagnostics Settings

3.5.1 Ping Diagnostics

This page shows the Ping Diagnostics information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	--------------------	-------	------------

Diagnostics

> Ping

> Ping6

> Tracert

> Tracert6

> Loop Detection

Ping Diagnostics

This page is used to send ICMP ECHO_REQUEST packets to network host. The diagnostic result will then be displayed.

Host Address:

WAN Interface:

Any ▼

Start

Figure 26: Ping Diagnostics Information

3.5.2 Ping6 Diagnostics

This page shows the Ping6 Diagnostics information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Diagnostics

- > Ping
- > **Ping6**
- > Tracert
- > Tracert6
- > Loop Detection

Ping6 Diagnostics

This page is used to send ICMPv6 ECHO_REQUEST packets to network host. The diagnostic result will then be displayed.

Host Address:	<input type="text"/>
WAN Interface:	Any ▼

Start

Figure 27: Ping6 Diagnostics Information

3.5.3 Tracert Diagnostics

This page shows the Traceroute Diagnostics information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Diagnostics

- > Ping
- > Ping6
- > **Tracert**
- > Tracert6
- > Loop Detection

Traceroute Diagnostics

This page is used to print the route packets trace to network host. The diagnostic result will then be displayed.

Protocol:	ICMP ▼
Host Address:	<input type="text"/>
Number Of Tries:	3
Time out:	5 s
Data Size:	56 Bytes
DSCP:	0
Max HopCount:	30
WAN Interface:	Any ▼

Start

Figure 28: Traceroute Diagnostics Information

3.5.4 Traceroute6 Diagnostics

This page shows the Traceroute6 Diagnostics information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Diagnostics

- > Ping
- > Ping6
- > Tracert
- > Traceroute6
- > Loop Detection

Traceroute6 Diagnostics

This page is used to print the route packets trace to network host. The diagnostic result will then be displayed.

Host Address:	<input type="text"/>
Number Of Tries:	<input type="text" value="3"/>
Time out:	<input type="text" value="5"/> s
Data Size:	<input type="text" value="56"/> Bytes
Max HopCount:	<input type="text" value="30"/>
WAN Interface:	<input type="text" value="Any"/>

Figure 29: Traceroute6 Diagnostics Information

3.5.5 Loop Detection

This page shows the Loop Detection information.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Diagnostics

- > Ping
- > Ping6
- > Tracert
- > Traceroute6
- > Loop Detection

Loop Detection

This page is used to configure loop detection parameters. Here you can change the settings or view loop detection status.

Loop DetectionConfiguration	
Loop Detection Enable:	<input checked="" type="checkbox"/>
Detection Interval:	<input type="text" value="5"/> (1~60)seconds
Recovery Interval:	<input type="text" value="300"/> (10 ~ 1800)seconds
EtherType:	0x <input type="text" value="FFFA"/>
VLAN ID:	<input type="text" value="0"/>
seperate by ",", 0 represents untagged, ex. 0,45,46	

Loop DetectionStatus	
Lan Port	Status
LAN1	No Loop
LAN2	No Loop
LAN3	No Loop
LAN4	No Loop

Figure 30: Loop Detection Diagnostics Information

3.6 Admin Interface

3.6.1 Commit/Reboot

This page shows the Interface of commit and reboot operation for the admin role.

[Logout](#)
 Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Admin

- > **Commit/Reboot**
- > Multi-lingual Settings
- > Backup/Restore
- > System Log
- > Password
- > ACL
- > Time Zone
- > Logout

Commit and Reboot

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

Commit and Reboot: Commit and Reboot

Figure 31: Commit/Reboot Operation

3.6.2 Multi-lingual Settings

This page shows the Interface of language settings.

[Logout](#)
 Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Admin

- > Commit/Reboot
- > **Multi-lingual Settings**
- > Backup/Restore
- > System Log
- > Password
- > ACL
- > Time Zone
- > Logout

Multi-Lingual Setting

This page is used to set multi-lingual.

Language Select: English ▼

Update selected language

Figure 32: Multi-lingual Settings

3.6.3 Backup/Restore Settings

This page shows the Interface of backup and restore settings.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Admin

- > Commit/Reboot
- > Multi-lingual Settings
- > Backup/Restore
- > System Log
- > Password
- > ACL
- > 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: Backup...

Restore Settings from File:
Select... No File Selected.
Restore

Reset Settings to Default: Reset

Figure 33: Backup/Restore Settings

3.6.4 System Log

This page shows the Interface of system log information and save/clear logs.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Admin

- > Commit/Reboot
- > Multi-lingual Settings
- > Backup/Restore
- > System Log
- > Password
- > ACL
- > Time Zone
- > Logout

System Log

System Log: ☒ Disable ☐ Enable

Log Level: Emergency ▼

Display Level: Emergency ▼

Maximum log length: 16384

Mode: Local ▼

Server IP Address:

Server UDP Port:

Apply Changes

Save Log to File: Save...

Clear Log: Reset

System Log			
Date/Time	Facility	Level	Message
Refresh			

Figure 34: System Log Settings

3.6.5 Password

This page shows the Interface of user password configuration.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Admin

- > Commit/Reboot
- > Multi-lingual Settings
- > Backup/Restore
- > System Log
- > Password
- > ACL
- > Time Zone
- > Logout

Password

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

Login User:	user
Old Password:	<input type="password"/>
New Password:	<input type="password"/>
Confirmed Password:	<input type="password"/>

Apply Changes
Reset

Figure 35: Password Configuration

3.6.6 ACL Configuration

This page shows the Interface of ACL IP information and ACL Table configuration.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Admin

- > Commit/Reboot
- > Multi-lingual Settings
- > Backup/Restore
- > System Log
- > Password
- > ACL
- > Time Zone
- > Logout

ACL Configuration

This page is used to configure the IP Address for Access Control List. If ACL is enabled, only the IP address in the ACL Table can access CPE. Here you can add/delete the IP Address.

ACL Capability:	<input checked="" type="radio"/> Disable <input type="radio"/> Enable	Apply Changes
Enable:	<input checked="" type="checkbox"/>	
Interface:	LAN ▼	
Start IP Address:	<input type="text"/>	
End IP Address:	<input type="text"/>	

ServiceName	LAN
Any	<input type="checkbox"/>
TELNET	<input type="checkbox"/>
FTP	<input type="checkbox"/>
TFTP	<input type="checkbox"/>
HTTP	<input type="checkbox"/>
HTTPS	<input type="checkbox"/>
PING	<input checked="" type="checkbox"/>

Add

ACL Table					
Select	State	Interface	IP Address	Services	Port

Delete Selected

Figure 36: ACL Configuration

3.6.7 Time Zone

This page shows the Interface of Time Zone configuration for synchronizing with public time server over the internet.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Admin

- > Commit/Reboot
- > Multi-lingual Settings
- > Backup/Restore
- > System Log
- > Password
- > ACL
- > Time Zone
- > Logout

Time Zone Configuration

You can maintain the system time by synchronizing with a public time server over the Internet.

Current Time :	Year <input type="text" value="1970"/> Mon <input type="text" value="1"/> Day <input type="text" value="1"/> Hour <input type="text" value="8"/> Min <input type="text" value="13"/> Sec <input type="text" value="43"/>
Time Zone Select :	<input type="text" value="Asia/Shanghai (UTC+08:00)"/>
Enable Daylight Saving Time	<input checked="" type="checkbox"/>
Enable SNTP Client Update	<input checked="" type="checkbox"/>
WAN Interface:	<input type="text" value="Any"/>
SNTP Server 1 :	<input type="text" value="clock.fmt.he.net"/>
SNTP Server 2 :	<input type="text" value="clock.nyc.he.net"/>

Figure 37: Time Zone Configuration

3.6.8 Logout

This page shows the Interface of user logout from the device.

[Logout](#)
Firmware ver. V3.3.103

Status	LAN	WLAN	Diagnostics	Admin	Statistics
--------	-----	------	-------------	-------	------------

Admin

- > Commit/Reboot
- > Multi-lingual Settings
- > Backup/Restore
- > System Log
- > Password
- > ACL
- > Time Zone
- > Logout

Logout

This page is used to logout from the Device.

Figure 38: Logout

3.7 Statistics

3.7.1 Interface

This page shows the Interface of transmission and reception data information of different interfaces.

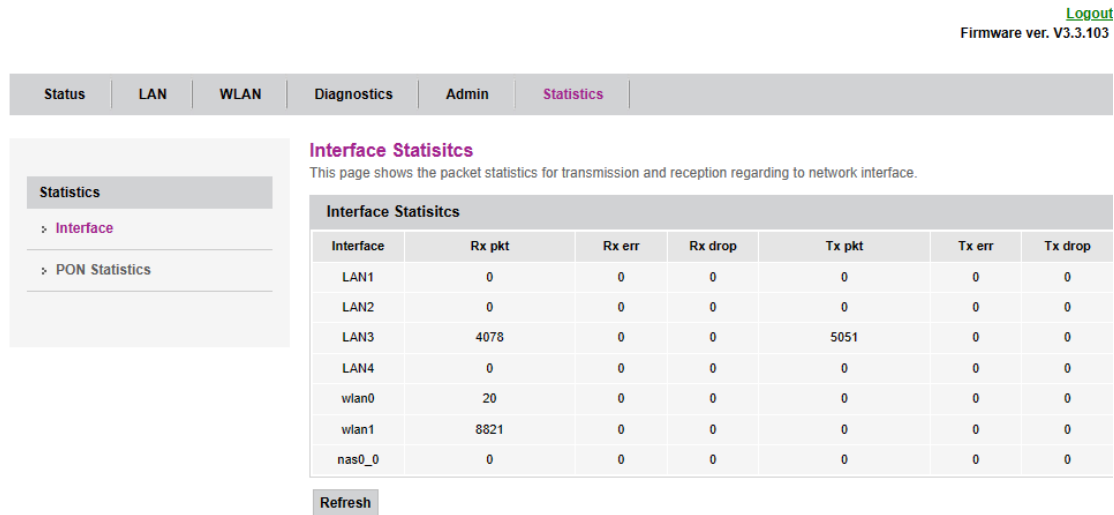


Figure 39: Interface Statistics

3.7.2 PON Statistics

This page shows the Interface of PON transmission and reception status in different dimensions.

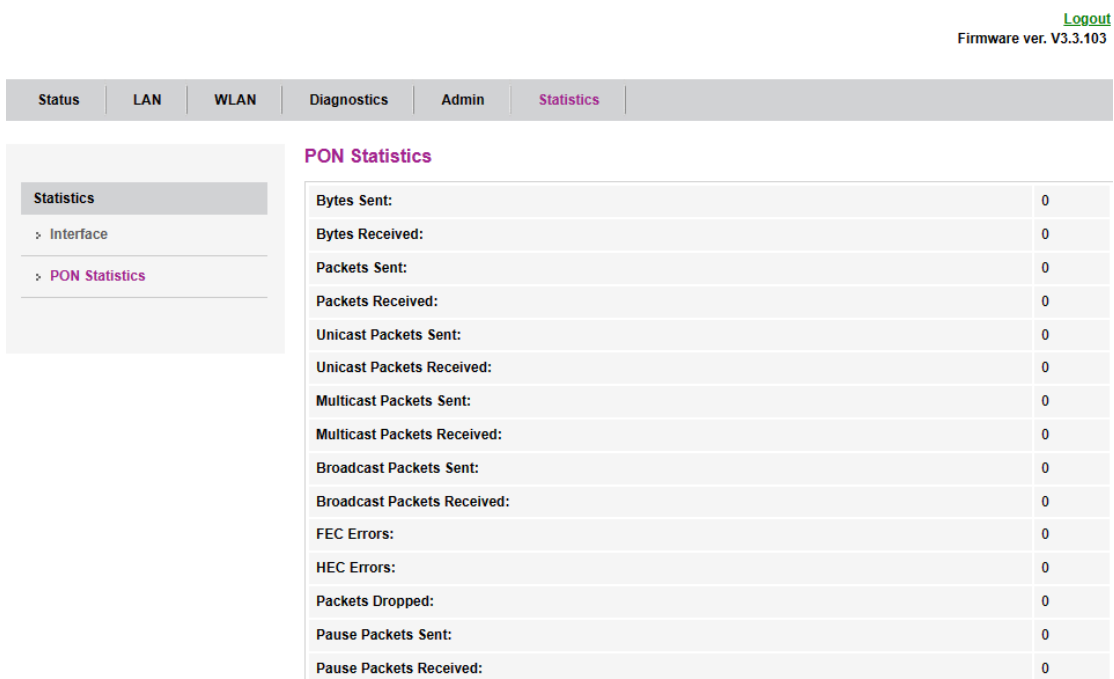
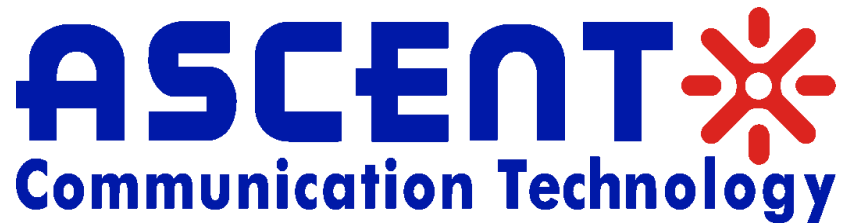


Figure 40: PON Statistics



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

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