

ALL-WAPC0435AC

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Chapter 1 Product Overview

Introduction

Key Features

can be used with 802.3at capable switches or injectors

- Deploy and manage with ease using C-Series Wireless Management Switches.
- Internal 5dBi Omni-Directional MIMO antennas optimized for maximum RF performance.
- Backward compatible with IEEE802.11a/b/g/n wireless devices.
- Integrated Power over Ethernet (IEEE802.3af/at) for lowering deploying costs. Can be powered using either the included power adapter or via PoE with PoE 802.3af/at capable Switches or Injectors.
- Band Steering to load balance clients between 2.4GHz and 5 GHz for better throughput performance.¹
- Secured Guest Network.
- Stylish low profile design with easy ceiling mounting kit.

Note: ¹ Feature available only for dual band models.

Introduction

This device is an enhanced-powered, long-range wireless access point. It is designed to operate in numerous environments; from large homes, small and medium-sized businesses, multiple-floor offices, hotels, and other venues, to larger enterprise deployments. Its enhanced-powered, long-range characteristics make it a cost-effective alternative to ordinary Access Points that don't have the range and reach to connect to a growing number of wireless users who wish to connect to a large hotspot or business network.

To protect sensitive data during wireless transmissions, the device offers different encryption settings for wireless transmissions, including industry standard WPA and WPA2 encryption. The device also includes MAC address filtering to allow network administrators to offer network access only to known computers and other devices based on their MAC addresses.

System Requirements

The following are the Minimum System Requirements in order to configure the device:

- Computer with an Ethernet interface or wireless network capability
- Windows OS (XP, Vista, 7, 8), Mac OS, or Linux-based operating systems
- Web-Browsing Application (i.e.: Internet Explorer, Firefox, Chrome, Safari, or another similar browser application)

Package Contents

The package contains the following items (all items must be in package to issue a refund):

- ALLNET Indoor Access Point
- Power Adapter
- RJ-45 Ethernet Cable
- Quick Installation Guide
- Ceiling and Wall Mount Screw kit

Applications

Wireless LAN (WLAN) products are easy to install and highly efficient. The following list describes some of the many applications made possible through the power and flexibility of WLANs:

- Difficult-to-Wire Environments: There are many situations where wires cannot be installed, deployed easily, or cannot be hidden from view. Older buildings, sites with multiple buildings, and/or areas that make the installation of a Ethernet-based LAN impossible, impractical or expensive are sites where WLAN can be a network solution.
- Temporary Workgroups: Create temporary workgroups/networks in more open areas within a building; auditoriums, amphitheaters classrooms, ballrooms, arenas, exhibition centers, or temporary offices where one wants either a permanent or temporary Wireless LAN established.
- The Ability to Access Real-Time Information: Doctors/Nurses, Point-of-Sale Employees, and/or Warehouse Workers can access real-time information while dealing with patients, serving customers, and/or processing information.
- Frequently Changing Environments: Set up networks in environments that change frequently (i.e.: Show Rooms, Exhibits, etc.).
- Small Office and Home Office (SOHO) Networks: SOHO users require a cost-effective, easy, and quick installation of a small network.
- Training/Educational Facilities: Training sites at corporations or students at universities use wireless connectivity to exchange information between peers and easily access information for learning purposes.

Technical Specifications

		ALL-WAPC0435AC
Wi-Fi Standard	2.4GHz	IEEE 802.11b/g/n
WI-FI Standard	5GHz	IEEE 802.11a/n/ac
Radio Chains / Streams		2x2:2
2.4GHz		300 Mbps
Max Data Rate	5GHz	867 Mbps
	·	1 x 10/100/1000 Gigabit Ethernet Port
Interface		1 x Reset Button
		1 x Power Connector
LED Indicator		Power, WLAN, LAN, Mesh
PoE Support		IEEE802.3at
Dower Boguiron	ant	External Power Adapter
Power Requirem	ient	DC IN, 12V/2A
		Operating:
		Temperature: 32°F to 104°F (0°C to 40°C)
Environment		Humidity (Non-condensing): 90% or less
Environment		Storage:
		Temperature: -4°F to 140°F (-20°C to 60°C)
		Humidity (Non-condensing): 90% or less
Dimensions		161.5 x 41.5mm

Physical Interface



- 1. Reset Button: Press and hold for over 10 seconds to reset to factory default settings.
- 2. LED Indicators: LED lights for Mesh, WLAN 5GHz, WLAN 2.4GHz, LAN, and Power
- 3. LAN Port (802.3at PoE): Ethernet port for RJ-45 cable.
- 4. Power Connector: 12V DC IN for Power Adapter.
- 5. Ceiling (Wall) Mount Hole: Using the provided mounting kit, the Access Point can be attached to a ceiling or wall.
- 6. Kensington Security Slot: To protect your Access Point, use the Kensington Security Slot to attach a cable lock.

Chapter 2 **Before You Begin**



Before You Begin

This section will guide you through the installation process. Placement of the ALLNET Access Point is essential to maximize the Access Point's performance. Avoid placing the Access Point in an enclosed space such as a closet, cabinet, or stairwell.

Considerations for Wireless Installation

The operating distance of all wireless devices can often not be pre-determined due to a number of unknown obstacles in the environment in which the device is deployed. Obstacles such as the number, thickness, and location of walls, ceilings, or other objects that the Access Point's wireless signals must pass through can weaken the signal. Here are some key guidelines for allowing the Access Point to have an optimal wireless range during setup.

- Keep the number of walls and/or ceilings between the Access Point and other network devices to a minimum. Each wall and/or ceiling can reduce the signal strength, resulting in a lower overall signal strength.
- Building materials make a difference. A solid metal door and/or aluminum stubs may have a significant negative effect on the signal strength of the Access Point. Locate your wireless devices carefully so the signal can pass through drywall and/or open doorways. Materials such as glass, steel, metal, concrete, water (example: fish tanks), mirrors, file cabinets, and/or brick can also diminish wireless signal strength.
- Interference from your other electrical devices and/or appliances that generate RF noise can also diminish the Access Point's signal strength. The most common types of devices are microwaves or cordless phones.

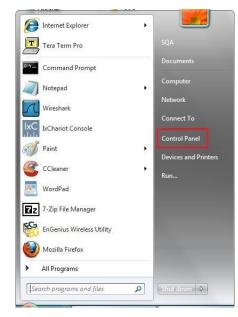
Computer Settings

Windows XP/Windows 7

In order to use the Access Point, you must first configure the TCP/IPv4 connection of your Windows OS computer system.

1. Click the **Start** button and open the **Control Panel**.





Windows XP

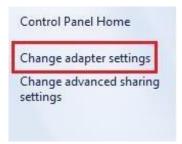
Windows 7

2a. In Windows XP, click on Network Connections.



2b. In **Windows 7**, click **View network status and tasks** in the **Network and Internet** section, then select **Change adapter settings.**





3. Right click on **Local Area Connection** and select **Properties**.



4. Select Internet Protocol Version 4 (TCP/IPv4) and then select Properties.



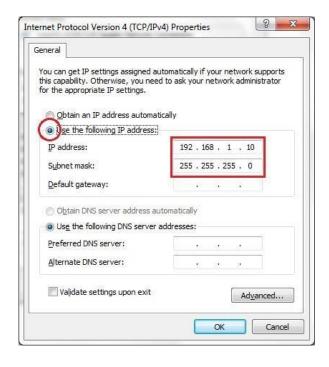
5. Select **Use the following IP address** and enter an IP address that is different from the Access Point and Subnet mask, then click **OK**.

Note: Ensure that the IP address and Subnet mask are on the same subnet as the device.

For example: Access Point IP address: 192.168.1.1

PC IP address: 192.168.1.2 - 192.168.1.255

PC Subnet mask: 255.255.255.0



Apple Mac OS X

- 1. Go to **System Preferences** (it can be opened in the **Applications** folder or by selecting it in the Apple Menu).
- 2. Select **Network** in the **Internet & Network** section.



- 3. Highlight **Ethernet**.
- 4. In Configure IPv4, select Manually.
- 5. Enter an IP address that is different from the Access Point and Subnet mask, then click **OK**.

Note: Ensure that the IP address and Subnet mask are on the same subnet as the device.

For example: Access Point IP address: 192.168.1.1

PC IP address: 192.168.1.2 - 192.168.1.255

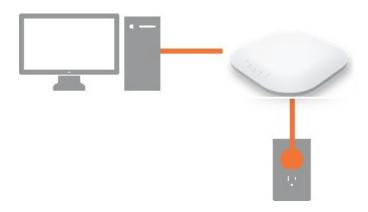
PC Subnet mask: 255.255.255.0

6. Click **Apply** when finished.



Hardware Installation

- 1. Ensure that the computer in use has an Ethernet Controller port (RJ-45 Ethernet Port). For more information, verify with your computer's user manual.
- 2. Connect one end of the Category 5e Ethernet cable into the RJ-45 port of the Access Point and the other end to the RJ-45 port of the computer. Ensure that the cable is securely connected to both the Access Point and the computer.
- 3. Connect the Power Adapter DC connector to the DC-IN port of the Access Point and the Power Adapter to an available electrical outlet. Once both connections are secure, verify the following:
 - a) Ensure that the **POWER** light is on (it will be **orange**).
 - b) Ensure that the 2.4 GHz/5 GHz WLAN light is on (it will be **blue** for 2.4G, and **green** for 5G).
 - c) Ensure that the LAN (Computer/ Access Point Connection) light is on (it will be **blue**).
 - d) Once all three lights are on, proceed to set up the Access Point using the computer.



Mounting the Access Point

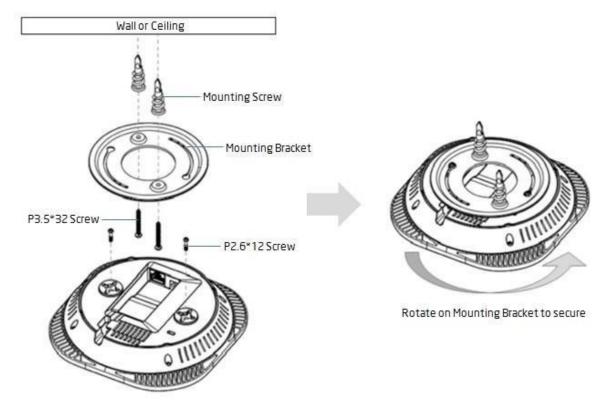
Using the provided hardware, the Access Point can be attached to a ceiling or wall.

To attach the Access Point to a ceiling or wall using the mounting bracket:

- 1. Attach the mounting bracket to the wall or ceiling using the provided wall/ceiling mounting hardware kit.
- 2. Insert the provided short screws into the bottom cover of the Access Point.

Leave enough of the screws exposed to ensure that the unit can be attached to the mounting bracket.

If extra space is required, use the provided spacers and long screws from the T-Rail mounting hardware kit to increase the space between the unit and the mounting bracket.

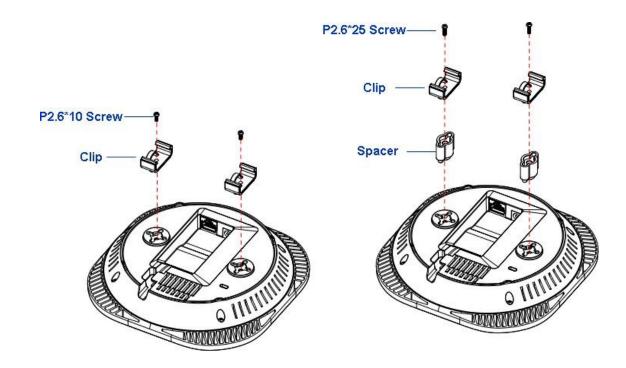


3. Mount the Access Point on the mounting bracket by rotating the unit clockwise about 90 degrees to secure it in place.

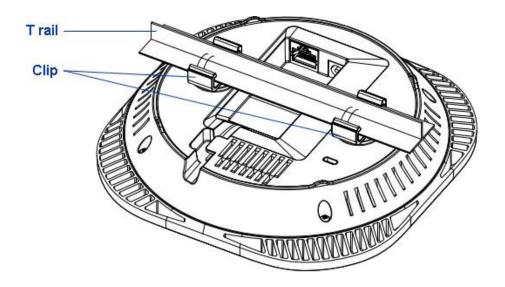
Attaching the Access Point to a ceiling using the provided T-Rail connectors:

1. Attach the T-Rail connectors to the bottom cover of the Access Point using the provided short screws.

Note: Two sizes of T-Rail connectors are included in the mounting hardware kit: 15/16in (2.38cm) and 9/16in (1.43cm). If extra space is required to accommodate drop ceiling tiles, use the provided spacers and long screws.



2. Line up the connected T-Rail connectors with an appropriately sized rail and press the unit onto the rail until it snaps into place.



Note: To protect your Access Point, use the Kensington Security Slot to attach a cable lock (cable lock is not included).

Chapter 3

Configuring Your Access Point

Configuring Your Access Point

This section will show you how to configure the device using the web-based configuration interface.

Default Settings

Please use your Ethernet port or wireless network adapter to connect the Access Point.

IP Address	192.168.1.1
Username/Password	admin/admin

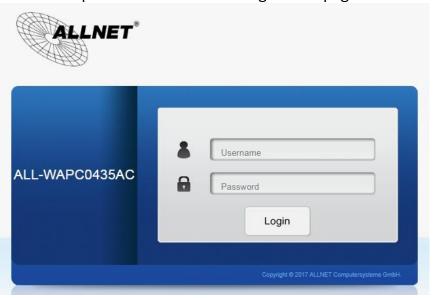
Web Configuration

1. Open a web browser (Internet Explorer/Firefox/Safari) and enter the IP Address http://192.168.1.1.



Note: If you have changed the default LAN IP Address of the Access Point, ensure you enter the correct IP Address.

2. The default username and password are: **admin**. Once you have entered the correct username and password, click the **Login** button to open the web-based configuration page.



4.If successful, you will be logged in and see the Access Point User Interface.

*Model name varies depending on model.



ALL-WAPC0435AC

Dual Radio AP, 2T2R, 300Mbps + 867Mbps

Änderungen: 0

Reset

Ausloggen

♦ MeshStatusEinstellungenWerkzeuge

Wireless

Ansteuerung Erweiterte

Zeitzone WLAN-Planer Werkzeuge

▲ Systemmanager

Konto Firmware Logbuch

Geräteinformationen

Gerätename	ALL-WAPC0435AC	
Seriennummer		
MAC-Adresse		
- LAN	88:DC:96:5A:92:DC	
- WLAN - 2.4GHz	88:DC:96:5A:92:DD	
- WLAN - 5GHz	88:DC:96:5A:92:DE	
Land	Bitte das Land wählen	
Lokale Zeit	Tue Oct 10 10:12:51 2017	
Laufzeit	0h 6m 22s	
Firmwareversion	3.0.0 + 1.8.60	
Verwaltung VLAN ID	Nicht markiert	
Registrierungsprüfcode	71cf3f86	

Speicherinformationen

Insgesamt verfügbar	90172 kB / 126484 kB (71%)
Frei	64952 kB / 126484 kB (51%)
Zwischengespeichert	18252 kB / 126484 kB (14%)
Gepuffert	6968 kB / 126484 kB (5%)

Chapter 4 Overview

Overview

The **Overview** section contains the following options:

- Device Status
- Connections

The following sections describe these options.

Device Status

Clicking the **Device Status** link under the **Overview** menu shows the status information about the current operating mode.

• The **Device Information** section shows general system information such as Device Name, MAC address, Current Time, Firmware Version, and Management VLAN ID

Geräteinformationen

Gerätename	ALL-WAPC0435AC
Seriennummer	
MAC-Adresse	
- LAN	88:DC:96:5A:92:DC
- WLAN - 2.4GHz	88:DC:96:5A:92:DD
- WLAN - 5GHz	88:DC:96:5A:92:DE
Land	Bitte das Land wählen
Lokale Zeit	Tue Oct 10 10:12:51 2017
Laufzeit	0h 6m 22s
Firmwareversion	3.0.0 + 1.8.60
Verwaltung VLAN ID	Nicht markiert
Registrierungsprüfcode	71cf3f86

• The **LAN Information** section shows the Local Area Network settings such as the LAN IP Address, Subnet mask, Gateway, DNS Address, DHCP Client, and STP status.

LAN Information - IPv4	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
Primary DNS	0.0.0.0
Secondary DNS	0.0.0.0
DHCP Client	Disable
Spanning Tree Protocol (STP)	Disable
LAN Information - IPv6	
IP Address	N/A
Link-Local Address	fe80::8adc:96ff:fe05:b068
Gateway	N/A
Primary DNS	N/A
Secondary DNS	N/A

• The **Wirelesss LAN Information 2.4 GHz/5 GHz** section shows wireless information such as Operating Mode, Frequency, and Channel. Since the Access Point supports multiple-SSIDs, information about each SSID and security settings are displayed.

WLAN-Einstellungen - 2.4GHz

Aktivieren	SSID	Bearbeiten	Sicherheits	Ausgeblendete SSID	Client- Isolierung	VLAN- Isolierung	L2- Isolation	V-LAN ID
	ALL-WAPC0435AC_1-2.4G	Bearbeiten	Keine					1
	ALL-WAPC0435AC_2-2.4G	Bearbeiten	Keine	0				2
	ALL-WAPC0435AC_3-2.4G	Bearbeiten	Keine					3
	ALL-WAPC0435AC_4-2.4G	Bearbeiten	Keine	0				4
	ALL-WAPC0435AC_5-2.4G	Bearbeiten	Keine					5
	ALL-WAPC0435AC_6-2.4G	Bearbeiten	Keine					6
	ALL-WAPC0435AC_7-2.4G	Bearbeiten	Keine					7
	ALL-WAPC0435AC_8-2.4G	Bearbeiten	Keine					8

^{*}Wireless LAN Information - 5GHz only available for 5GHz capable models.

WLAN-Einstellungen - 5GHz

Aktivieren	SSID	Bearbeiten	Sicherheits	Ausgeblendete SSID	Client- Isolierung	VLAN- Isolierung	L2- Isolation	V-LAN ID
	ALL-WAPC0435AC_1-5GH	Bearbeiten	Keine					51
	ALL-WAPC0435AC_2-5GH	Bearbeiten	Keine					52
	ALL-WAPC0435AC_3-5GH	Bearbeiten	Keine					53
	ALL-WAPC0435AC_4-5GH	Bearbeiten	Keine					54
	ALL-WAPC0435AC_5-5GH	Bearbeiten	Keine					55
	ALL-WAPC0435AC_6-5GH	Bearbeiten	Keine					56
	ALL-WAPC0435AC_7-5GH	Bearbeiten	Keine					57
	ALL-WAPC0435AC_8-5GH	Bearbeiten	Keine					58

Connections

Clicking the **Connections** link under the **Device Status** menu displays the list of clients associated to the Access Point's 2.4GHz/5GHz, along with the MAC address, TX, RX and signal strength for each client. Clicking **Kick** in the Block column removes this client.

Verbindungsliste - 2.4GHz

SSID	MAC-Adresse	TX (KB)	RX (KB)	RSSI (dBm)	Block
ALL-WAPC0435AC_1 -2.4GHz	7c:dd:90:46:f4:53	232 KB	174 KB	-64dBm	Kick
Verbindungsliste	- 5GHz				

Erfrischen

Click **Refresh** to refresh the Connection List page.

Chapter 5

Network

Basic

This page allows you to modify the device's IP settings and the Spanning Tree settings. Enabling Spanning Tree protocol will prevent network loops in your LAN network.

IPv4 Settings

IPv4 Settings

IP Network Setting	O DHCP Static IP
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
Primary DNS	0.0.0.0
Secondary DNS	0.0.0.0

IP Network Setting: Select whether the device IP address will use the static IP address specified in the IP Address field or be obtained automatically when the device connects to a DHCP server.

IP Address: The IP Address of this device.

IP Subnet Mask: The IP Subnet mask of this device.

Gateway: The Default Gateway of this device. Leave it blank if you are unsure of this setting.

Primary/Secondary DNS: The primary/secondary DNS address for this device.

IPv6 Settings

IPv6 Settings	✓ Link-local Address				
IP Address					
Subnet Prefix Length					
Gateway					
Primary DNS					
Secondary DNS					

Link-Local Address: Check this if you want to use Link-Local Address.

IP Address: The IPv6 IP Address of this device.

Subnet Prefix Length: The IPv6 Subnet Prefix Length of this device.

Gateway: The IPv6 Default Gateway of this device. Leave it blank if you are unsure of this setting.

Primary / Secondary DNS: The primary / secondary DNS address for this device.

Spanning Tree Settings

Spanning Tree Protocol (STP) Settings

Status	○ Enable Disable	
Hello Time	2 second	s (1-10)
Max Age	20 second	s (6-40)
Forward Delay	4 second	s (4-30)
Priority	32768 (0-6553	35)



Status: Enables or disables the Spanning Tree function.

Hello Time: Specify Bridge Hello Time, in seconds. This value determines how often the device sends handshake packets to communicate information about the topology throughout the entire Bridged Local Area Network.

Max Age: Specify Bridge Max Age, in seconds. If another bridge in the spanning tree does not send a hello packet for a long period of time, it is assumed to be inactive.

Forward Delay: Specifies Bridge Forward Delay, in seconds. Forwarding Delay Time is the time spent in each of the Listening and Learning states before the Forwarding state is entered. This delay is provided so that when a new bridge comes onto a busy network, it analyzes data traffic before participating.

Priority: Specify the Priority Number. A smaller number has greater priority.

Save: Click Save to confirm the changes.

Chapter 6

2.4GHz & 5GHzWireless

2.4GHz/5GHz SSID Profile

Under **Wireless Settings**, you can edit the SSID profile to fit your needs. Click **Edit** under the SSID you would like to make changes to.

Aktivieren	SSID	Bearbeiten	Sicherheits	Ausgeblendete SSID	Client- Isolierung	VLAN- Isolierung	L2- Isolation	V-LAN ID
•	ALL-WAPC0435AC_1-2.4G	Bearbeiten	WPA2/PSK AES	0		0		1
	ALL-WAPC0435AC_2-2.4G	Bearbeiten	Keine					2
	ALL-WAPC0435AC_3-2.4G	Bearbeiten	Keine					3
	ALL-WAPC0435AC_4-2.4G	Bearbeiten	Keine					4
	ALL-WAPC0435AC_5-2.4G	Bearbeiten	Keine					5
	ALL-WAPC0435AC_6-2.4G	Bearbeiten	Keine					6
	ALL-WAPC0435AC_7-2.4G	Bearbeiten	Keine					7
	ALL-WAPC0435AC_8-2.4G	Bearbeiten	Keine					8

A <mark>ktivier</mark> e	n SSID	Bearbeiten	Sicherheits	Ausgeblendete SSID	Client- Isolierung	VLAN- Isolierung	L2- Isolation	V-LAN ID
	ALL-WAPC0435AC_1-5GH	Bearbeiten	Keine					51
	ALL-WAPC0435AC_2-5GH	Bearbeiten	Keine					52
	ALL-WAPC0435AC_3-5GH	Bearbeiten	Keine					53
	ALL-WAPC0435AC_4-5GH	Bearbeiten	Keine					54
	ALL-WAPC0435AC_5-5GH	Bearbeiten	Keine					55
	ALL-WAPC0435AC_6-5GH	Bearbeiten	Keine					56
	ALL-WAPC0435AC_7-5GH	Bearbeiten	Keine					57
	ALL-WAPC0435AC_8-5GH	Bearbeiten	Keine					58

Enable: Check this option to enable this profile. **SSID:** Specifies the SSID for the current profile.

Security: Displays the Security Mode the SSID uses. You can click **Edit** to change the security mode. For more details, see the next section.

Hidden SSID: Check this option to hide the SSID from clients. If checked, the SSID will not appear in the site survey.

Client Isolation: Check this option to prevent communication between client devices.

VLAN Isolation: Check this option to enable VLAN Isolation feature.

VLAN ID: Specifies the VLAN ID for the SSID profile.

^{*5}GHz settings only available for dual radio models.

Wireless Security

The Wireless Security section lets you configure the Access Point's security modes: WEP, WPA-PSK, WPA2-PSK, WPA-PSK Mixed, WPA-Enterprise, WPA2-Enterprise and WPA Mixed Enterprise.

It is strongly recommended that you use **WPA2-PSK**. Click on the **Edit** button under Wireless Settings next to the SSID to change the security settings.

WEP

Security Mode	WEP 🔽
Auth Type	Open System ✓
Input Type	Hex 🗸
Key Length	40/64-bit (10 hex digits or 5 ASCII char)
Default Key	1
Key1	
Key2	
Key3	
Key4	

Auth Type: Select Open System or Shared Key.

Input Type: ASCII: Regular Text (Recommended) or HEX: Hexadecimal Numbers (For advanced users).

Key Length: Select the desired option and ensure the wireless clients use the same setting. Your choices are: 64, 128, and 152-bit password lengths.

Default Key: Select the key you wish to be default. Transmitted data is ALWAYS encrypted using the Default Key; the other Keys are for decryption only. You must enter a Key Value for the Default Key.

Encryption Key: Enter the Key Value or values you wish to use. The default is none.

WPA-PSK/WPA2-PSK (Pre-Shared Key)

Security Mode	WPA-PSK Mixed
Encryption	Both(TKIP+AES) ✓
Passphrase	
Group Key Update Interval	3600

Encryption: Select the WPA/WPA2 encryption type you would like to use. Available options are Both, TKIP(Temporal Key Integrity Protocol) and AES(Advanced Encryption Standard). Please ensure that your wireless clients use the same settings.

Passphrase: Wireless clients must use the same Key to associate the device. If using ASCII format, the Key must be from 8 to 63 characters in length. If using HEX format, the Key must be 64 HEX characters in length.

Group Key Update Interval: Specify how often, in seconds, the Group Key changes.

WPA/WPA2-Enterprise

Security Mode	WPA Mixed-Enterprise
Encryption	Both(TKIP+AES) ✓
Group Key Update Interval	3600
Radius Server	
Radius Port	1812
Radius Secret	
Radius Accounting	Disable ~
Radius Accounting Server	
Radius Accounting Port	1813
Radius Accounting Secret	
Interim Accounting Interval	600

Encryption: Select the WPA/WPA2 encryption type you would like to use. Available options are Both, TKIP(Temporal Key Integrity

Protocol) and AES(Advanced Encryption Standard). Please ensure that your wireless clients use the same settings.

Group Key Update Interval: Specify how often, in seconds, the group key changes.

Radius Server: Enter the IP address of the Radius server.

Radius Port: Enter the port number used for connections to the Radius server.

Radius Secret: Enter the secret required to connect to the Radius server.

Radius Accounting: Enables or disables the accounting feature.

Radius Accounting Server: Enter the IP address of the Radius accounting server.

Radius Accounting Port: Enter the port number used for connections to the Radius accounting server.

Radius Accounting Secret: Enter the secret required to connect to the Radius accounting server.

Interim Accounting Interval: Specify how often, in seconds, the accounting data sends.

Note: 802.11n does not allow WEP/WPA-PSK TKIP/WPA2-PSK TKIP security mode. The connection mode will automatically change from 802.11n to 802.11g.

Wireless MAC Filter

Wireless MAC Filter is used to allow or deny network access to wireless clients (computers, tablet PCs, NAS, smart phones, etc.) according to their MAC addresses. You can manually add a MAC address to restrict permission to access the Access Point. The default setting is: Disable Wireless MAC Filter.

ACL (Access Control List) Mode: Determines whether network access is granted or denied to clients whose MAC addresses appear in the MAC address table on this page. Choices given are: Disabled, Deny MAC in the list, or Allow MAC in the list.

MAC Address: Enter the MAC address of the wireless client. Add:

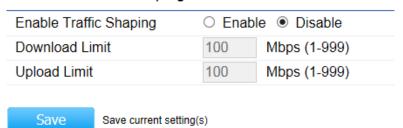
Click **Add** to add the MAC address to the MAC Addresstable.

Delete: Deletes the selected entries.

Traffic Shaping

Traffic Shaping regulates the flow of packets leaving an interface to deliver improved Quality of Service.

Wireless Traffic Shaping



Enable Traffic Shaping: Select to Enable or Disable Wireless Traffic Shaping.

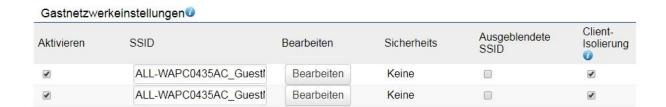
Download Limit: Specifies the wireless transmission speed used for downloading.

Upload Limit: Specifies the wireless transmission speed used for uploading.

Save: Click **Save** to apply the changes.

Guest Network

The Guest Network function allows administrators to grant Internet connectivity to visitors or guests while keeping other networked devices (computers and hard drives) and sensitive personal or company information private and secure.



Enable SSID: Select to Enable or Disable SSID broadcasting.

SSID: Specify the SSID for the current profile. This is the name visible on the network to wireless clients.

Security: You can use None or WPA-PSK / WPA2-PSK security for this guest network.

Hidden SSID: Check this option to hide the SSID from broadcasting to discourage wireless users from connecting to a particular SSID.

Client Isolation: Check this option to prevent wireless clients associated with your access point to communicate with other wireless devices connected to the AP.

After enabling Guest Network in the SSID Config page, assign an IP Address, Subnet Mask and DHCP server IP address range for this Guest Network.

Manual IP Settings	
- IP Address	192.168.200.1
- Subnet Mask	255.255.255.0
Automatic DHCP Server Settings	
- Starting IP Address	192.168.200.100
- Ending IP Address	192.168.200.200
- WINS Server IP	0.0.0.0

Manual IP Settings

IP Address: Specify an IP Address for the Guest Network

Subnet Mask: Specify the the Subnet Mask IP Address for the Guest Network

Automatic DHCP Server Settings

Starting IP Address: Specify the starting IP Address range for the Guest Network.

Ending IP Address: Specify the ending IP Address range for the Guest Network.

WINS Server IP: Specify the WINS Server IP Address for the Guest Network. WINS means Windows Internet Name Service. It is Microsoft's implementation of NetBIOS Name Service (NBNS), a name server and service for NetBIOS computer names.

Fast Handover

With Fast Handover enabled, the AP will send a disassociation request to the wireless client and let it find another AP to handover and associate upon detecting the wireless client's RSSI value lower than specified. The RSSI value can be adjusted to allow more clients to stay associated to this AP. Note that setting the RSSI value too low may cause wireless clients to reconnect frequently.

Fast Handover

Status	O Enable	e Disable
RSSI	-70	dBm (Range: -60dBm ~ -90dBm)

Management VLAN Settings

This section allows you to assign a VLAN tag to the packets. A VLAN is a group of computers on a network whose software has been configured so that they behave as if they were on a separate Local Area Network (LAN). Computers on VLAN do not have to be physically located next to one another on the LAN.

Status ○ Enable ● Disable 4096 Caution: If you encounter disconnection issue during the configuration process, verify that the switch and the DHCP server can support the new VLAN ID and then connect to the new IP address. Save Save current setting(s)

Status: If your network includes VLANs and if tagged packets need to pass through the Access Point, select **Enable** and enter the VLAN ID. Otherwise, click **Disable**.

Save: Click **Save** to apply the changes.

Note: If you reconfigure the Management VLAN ID, you may lose your connection to the Access Point. Verify that the DHCP server supports the reconfigured VLAN ID and then reconnect to the Access Point using the new IP address.

Chapter 7 Management

SNMP Settings

This page allows you to assign the Contact Details, Location, Community Name, and Trap Settings for Simple Network Management Protocol (SNMP). This is a networking management protocol used to monitor network attached devices. SNMP allows messages (called protocol data units) to be sent to various parts of the network. Upon receiving these messages, SNMP compatible devices (called agents) returns the data stored in their Management Information Bases. To configure SNMP Settings, click under the **Advanced** tab on the side bar under **Management**.

SNMP Settings		
Status	● Enable ○ Disable	е
Contact		
Location		
Port	161	
Community Name (Read Only)	public	
Community Name (Read Write)	private	
Trap Destination		
- Port	162	
- IP Address		
- Community Name	public	
SNMPv3 Settings		
- Status	● Enable ○ Disable	е
- Username	admin	(1-31 Characters)
- Authorized Protocol	MD5 🗸	
- Authorized Key	12345678	(8-32 Characters)
- Private Protocol	DES 🗸	
- Private Key	12345678	(8-32 Characters)
- Engine ID		

Status: Enables or Disables the SNMP feature.

Contact: Specifies the contact details of the device.

Location: Specifies the location of the device.

Port: Displays the port number.

Community Name (Read Only): Specifies the password for the SNMP community for read only access.

Community Name (Read/Write): Specifies the password for the SNMP community with read/write access.

Trap Destination Address: Specifies the port and IP address of the computer that will receive the SNMP traps.

Trap Destination Community Name: Specifies the password for the SNMP trap community.

SNMPv3 Status: Enables or Disables the SNMPv3 feature.

User Name: Specifies the username for the SNMPv3.feature

Auth Protocol: Select the Authentication Protocol type: MDS or SHA.

Auth Key: Specify the Authentication Key for authentication.

Priv Protocol: Select the Privacy Protocol type: DES.

Priv Key: Specifies the privacy key for privacy.

Engine ID: Specifies the Engine ID for SNMPv3.

CLI/SSH Settings

Most users will configure the device through the graphical user interface (GUI). However, for those who prefer an alternative method there is the command line interface (CLI). The CLI can be access through a command console, modem or Telnet connection. For security's concern, you can enable SSH (Secure Shell) to establish a secure data communication.

CLI Setting	
Status	● Enable ○ Disable
SSH Setting	
Status	○ Enable ● Disable

CLI Status: Select **Enable** or **Disable** to enable or disable the ability to modify the Access Point via a command line interface (CLI). **SSH Status:** Select **Enable** or **Disable** to enable or disable the ability to modify the Access Point via a command line interface (CLI) with a secure channel.

HTTPS Settings

HTTPS forward

Hypertext Transfer Protocol Secure (HTTPS) is a communications protocol for secure communication over a computer network, with especially wide deployment on the Internet. Technically, it is not a protocol in and of itself; rather, it is the result of simply layering the Hypertext Transfer Protocol (HTTP) on top of the SSL/TLS protocol, thus adding the security capabilities of SSL/TLS to standard HTTP communications.

Status • Enable • Disable

Status: Select **Enable** or **Disable** to enable or disable the ability to modify the Access Point via a HTTPS.

HTTPS forward: Enable this option; it will be forwarded to HTTPS if user uses HTTP to access the Access Point.

O Enable

Disable

Email Alert

The Access Point will send email alerts when configurations have been changed.

Email Alert □ Enable Status - From - To [Email-Alert][EWS320AP][88:DC:96:05:B0:68] Configur - Subject **Email Account** - Username - Password - SMTP Server Port: 25 Send Test Mail ~ - Security Mode None **Apply** Apply saved settings to take effect

Status: Check **Enable** to enable Email Alert feature.

From: Enter the address to show as the sender of the email.

To: Enter the address to show as the receiver of the email.

Subject: Enter the subject to show as the subject of the email.

Email Account

Username/Password: Enter the username and password required to connect to the SMTP server.

SMTP Server/Port: Enter the IP address/domain name and port of the SMTP server. The default port of SMTP Server is port 25.

Security Mode: Select the mode of security for the Email alert. The options are None, SSL/TLS and STARTTLS.

Send Test Mail: Click **Send Test Mail** button to test the Email Alert setup.

Apply: Click **Apply** to save the changes.

Date and Time Settings

This page allows you to set the internal clock of the Access Point. To access the Date and Time settings, click **Time Zone** under the **Management** tab on the side bar.

O Manu	ally Set	Date	and T	me		
Date:	2014		/ 01	/ 07		
Time:	11		16	(24-Hour)		
Syn	chronize	e wit	h PC			
Auton		0-4	D	oration statements		
Auton	natically	Gei	Date a	nd Time		
	atically Server:			nd Time		
NTP S	Server:	209	.81.9.7	nd Time		~
NTP S Time Zor	Server:	209 C+00	.81.9.7):00 Ga			V
NTP S Time Zo Time Zor □ Enab	Server: one ne: UT0	209 C+00 ght S	.81.9.7 0:00 Ga Saving			~

Manually Set Date and Time: Manually specify the date and time.

Synchronize with PC: Click to synchronize the Access Point's internal clock with the computer's time. Automatically Get

Date and Time: Enter the IP address of an NTP server or use the default NTP server to have the internal clock set automatically.

Time Zone: Choose the time zone you would like to use from the drop-down list.

Enable Daylight Savings: Check the box to enable or disable daylight savings time for the Access Point. Next, enter the dates that correspond to the present year's daylight savings time.

Click **Apply** to save the changes.

WiFi Scheduler

Use the schedule function to reboot the Access Point or control the wireless availability on a routine basis. The Schedule function relies on the GMT time setting acquired from a network time protocol (NTP) server. For details on how to connect the Access Point to an NTP server, see Date and Time Settings.

Auto Reboot Settings

You can specify how often you would like to reboot the Access Point.

Auto Reboot Settings

Status	○ Enable Disable
Timer	■ Sunday ■ Monday ■ Tuesday ■ Wednesday ■ Thursday ■ Friday ■ Saturday
	0 : 0

Status: Enables or disables the Auto Reboot function.

Timer: Specifies the time and frequency in rebooting the Access Point by Min, Hour and Day.

WiFi Scheduler

Einstellung automatischer Neustart

Status	 Aktivieren • 	Deaktivieren		
Timer	□ Sonntag □	Montag 🗆 Dienstag 🗆	Mittwoch	☐ Donnerstag ☐ Freitag ☐ Samstag
	0 :	0		
WLAN-Planer				
Status	Aktivieren •HINWEIS: Bittesynchronisiert		s die Zeit AN-Zeitp	zoneneinstellungen mit der lokalen Zeil lan aktivieren
WLAN-Funk	2.4GHz	¥		
SSID-Auswahl	ALL-WAPC043	5AC_1-2.4GH •		
Zeitplanvorlagen	Eine Vorlage w	ählen •		
	Tag	Verfügbare		Dauer
	Tag Sonntag	Verfügbare verfügbar	¥	Dauer 00:00 ~ 24:00
			v v	
planen Tabelle	Sonntag	verfügbar		00 : 00 ~ 24 : 00
planen Tabelle	Sonntag Montag	verfügbar verfügbar	v	00:00 ~ 24:00 00:00 ~ 24:00
planen Tabelle	Sonntag Montag Dienstag	verfügbar verfügbar verfügbar	Y	00:00 ~ 24:00 00:00 ~ 24:00 00:00 ~ 24:00
planen Tabelle	Sonntag Montag Dienstag Mittwoch	verfügbar verfügbar verfügbar verfügbar	v v	00:00 ~ 24:00 00:00 ~ 24:00 00:00 ~ 24:00 00:00 ~ 24:00

Status: Enables or disables the WiFi Scheduler function.

Wireless Radio: Select 2.4GHz or 5GHz* to use WiFi Schedule.

SSID Selection: Select a SSID to use WiFi Schedule.

Schedule Templates: There are 3 templates available: Always available, Available 8-5 daily and Available 8-5 daily except

weekends. Select Custom schedule if you want to set the schedule manually.

Schedule Table: Set the schedule manually.

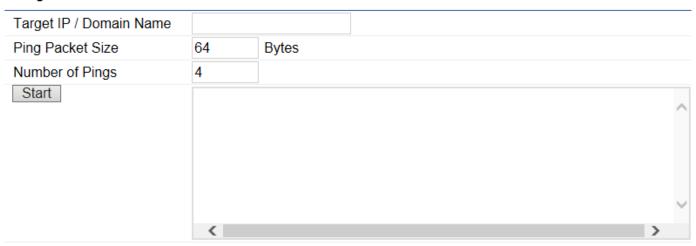
^{*5}GHz radio settings only available for dual radio models.

Tools

This section allows you to analyze the connection quality of the Access Point and trace the routing table to a target in the network.

Ping Test Parameters

Ping Test Parameters



Target IP/Domain Name: Enter the IP address or Domain name you would like to search.

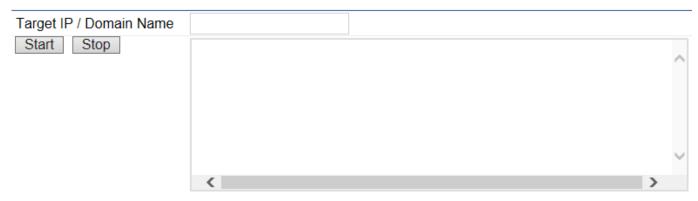
Ping Packet Size: Enter the packet size of each ping.

Number of Pings: Enter the number of times you wish to ping.

Start: Click **Start** to begin pinging target device (via IP).

Traceroute Parameters

Traceroute Test Parameters



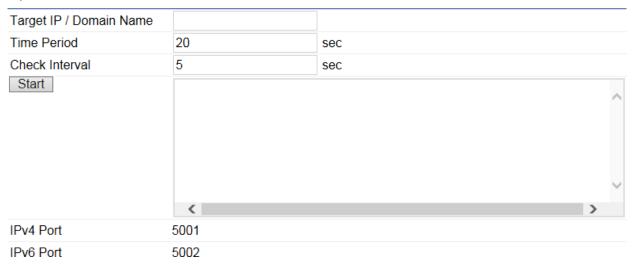
Target IP/Domain Name: Enter an IP address or domain name you wish to trace.

Start: Click **Start** to begin the trace route operation.

Stop: Halts the traceroute test.

Speed Test Parameters

Speed Test Parameters



Target IP/Domain Name: Enter an IP address or domain name you wish to run a Speed Test for.

Time Period: Enter the time in seconds that you would like the test to run for and in how many intervals.

Start: Starts the Speed Test.

IPv4 / IPv6 Port: The Access Point uses IPv4 port 5001 and IPv6 port 5002 for the speed test.

LED Control

This section allows you to control the LED control functions: Power status, LAN interface and 2.4GHz/5GHz WLAN interface.

LED Control

Power	● Ena	able	0	Disable
LAN	● Ena	able	0	Disable
WLAN-2.4GH	z	able	0	Disable
WLAN-5GHz	● Ena	able	0	Disable
Apply	Apply saved settings to take effect			

Click **Apply** to save the settings after selecting your choices from the boxes.

^{*5}GHz settings only available for dual radio models.

Device Discovery

Under Device Discovery, you can choose for the Access Point to automatically scan for local devices to connect to. Click **Scan** to begin the process.

Device Discovery

Device Name	Operation Mode	IP Address	System MAC Address	Firmware Version
C				

Scan

Chapter 8

System Manager

Account Setting

This page allows you to change the username and password of the device. By default, the username is **admin** and the password is **admin**. The password can contain from 0 to 12 alphanumeric characters and is case sensitive.

Account Settings

Administrator Username	admin
Current Password	
New Password	
Verify Password	



Apply saved settings to take effect

Administrator Username: Enter a new username for logging in to the Administrator Username entry box.

Current Password: Enter the old password for logging in to the Current Password entry box.

New Password: Enter the new password for logging in to the New Password entry box.

Verify Password: Re-enter the new password in the Verify Password entry box for confirmation.

Apply: Click **Apply** to save the changes.

Note: it is highly recommended that you change your password to something more unique for greater security.

Firmware Upgrade

This page allows you to upgrade the Firmware of the Access Point.

Current Firmware Version: 2.0.0 Select the new firmware from your hard disk. Browse... Upload

To Perform the Firmware Upgrade:

- 1. Click the **Browse...** button and navigate the OS File System to the location of the Firmware upgrade file.
- 2. Select the upgrade file. The name of the file will appear in the Upgrade File field.
- 3. Click the **Upload** button to commence the Firmware upgrade.

Note: The device is unavailable during the upgrade process and must restart when the upgrade is completed. Any connections to or through the device will be lost.

Backup/Restore

This page allows you to save the current device configurations. When you save the configurations, you can also reload the saved configurations into the device through the **Restore New Settings** from a file folder. If extreme problems occur, or if you have set the Access Point incorrectly, you can use the **Reset** button in the **Reset to Default** section to restore all the configurations of the Access Point to the original default settings. To Configure the Backup/Restore Settings, click **Firmware** under the **Systems Manager** tab.

Backup/Restore Settings

Factory Setting		
- Backup Setting	Export	
- Restore New Setting		Browse Import
- Reset to Default	Reset	
User Setting		
- Back Up Setting as Default	Backup	
- Restore to User Default	Restore	

Factory Setting

Backup Setting: Click **Export** to save the current device configurations to a file. **Restore New Setting:** Choose the file you wish restore for settings and click **Import**.

Reset to Default: Click the **Reset** button to restore the Access Point to its factory default settings.

User Setting

Back Up Setting as Default: Click **Backup** to backup the user settings you would like to use as the default settings. **Restore to User Default:** Click **Restore** to restore the Access Point to user's default settings.

System Log

This page allows you to setup the System Log and local log functions of the Access Point. Click **Log** under the **Systems Manager** tab to open up the System Log page.

System Log Status Aktivieren Deaktivieren Protokolltyp Warnung Erfrischen Oct 10 10:21:09 ALL-WAPC0435AC kern.alert kernel: [879.360000] HTC Service:0x0100 ep:2 TX flow control Oct 10 10:21:09 ALL-WAPC0435AC kern.alert kernel: [879.350000] Target:87219000 HTC Service:0x0100, U Löschen Oct 10 10:21:09 ALL-WAPC0435AC kern.alert kernel: [879.350000] HTC Service:0x0300 ep:1 TX flow control Oct 10 10:21:09 ALL-WAPC0435AC kern.alert kernel: [879.340000] Target:87219000 HTC Service:0x0300, U Oct 10 10:21:09 ALL-WAPC0435AC kern.alert kernel: [879.340000] -HWT Externes Protokoll Aktivieren Deaktivieren Log Server IP-Adresse Gespeicherte Einstellungen zum Wirksamwerden übernehmen.

Status: Enables or disables the System Log function.

Log Type: Select the Log Type mode you would like to use.

Remote Log: Enables or disables the Remote Log feature. If enabled, enter the IP address of the Log you would like to remote to.

Log Server IP Address: Enter the IP address of the log server.

Apply: Click **Apply** to save the changes.

Reset

In some circumstances, you may be required to force the device to reboot. Click on **Reboot the Device** to reboot the device.



Logout

Click **Logout**, it will pop up a warning window. Click **OK** to logout.



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EU contact:

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