



WAVE 2 AC WIRELESS ACCESS POINT

Quick Start Guide



AN-510-AP-I-AC
AN-810-AP-I-AC



Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device is designed for indoor use only.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

In the North American market, only channels 1-11 can be operated. Other channels cannot be selected.



Industry Canada Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:

- (i) The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) For product available in the USA/Canada market, only channel 1-11 can be operated. Selection of other channels is not possible.

Avertissement:

- (i) Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.



Industry Canada Statement, Continued

Radiation Exposure Statement:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Industry Canada Warning

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications. Ce produit répond aux spécifications techniques applicables à l'innovation, Science et Développement économique Canada

CE Warning

This is a product with CE certification. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

These products are intended to be powered by either PoE/PoE+ or a 12V/2A power supply.

These products use PoE/PoE+ IN(48V/0.53A) for both the AN-510-AP-I-AC and AN-810-AP-I-AC.



CE Statement

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

All operational modes:

2.4GHz: 802.11b, 802.11g, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20), 802.11ac (VHT40)

5GHz: 802.11a, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20), 802.11ac (VHT40), 802.11ac (VHT80)

The frequency and the maximum transmitted power in EU are listed below:

AN-510-AP-I-AC	AN-810-AP-I-AC
2412-2472MHz: 14.7 dBm	2412-2472MHz: 17dBm
5180-5240MHz: 17.4 dBm	5180-5240MHz: 18dBm

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range..



AT	BE	BG	HR	CY	CZ	DK
EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL
PT	RO	SK	SI	ES	SE	UK

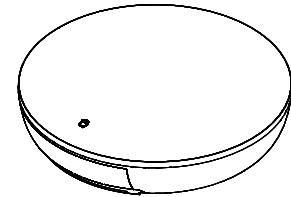


Welcome to Araknis Networks™

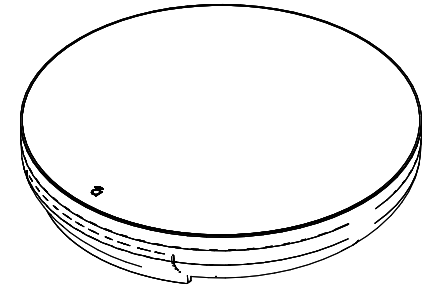
Thank you for choosing an Araknis™ WAVE 2 AC Wireless Access Point (WAP). With newly designed circular housing, an ingeniously easy new mounting system, convenient PoE power, and the latest WAVE 2 AC wireless technologies, these products are ideal as staples in both residential and commercial applications.

Features

- Sleek Circular Design
- Unobtrusive Recessed Lighting
- 1 x Gigabit LAN Port (w/802.3at PoE-IN)
- 1 x Gigabit LAN Port (data only)
- 1 x USB 2.0 (power only)
- Multi-User MIMO
- AN-510-AP-I-AC: 2x2 Dual-Band Wave 2-AC 1300Mbps
- AN-810-AP-I-AC: 4x4 Dual-Band Wave 2-AC 2600Mbps
- OvrC Enabled



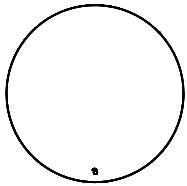
AN-510-AP-I-AC



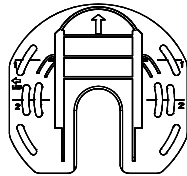
AN-810-AP-I-AC



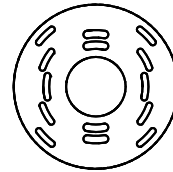
Step 1: Unbox



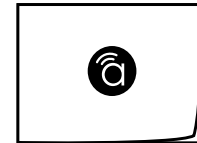
Wireless Access Point
(WAP)*



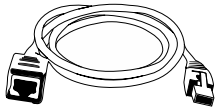
Mounting Bracket



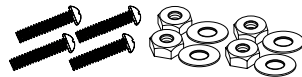
Tile Ceiling Backing Plate



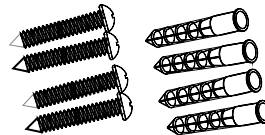
Quick Start Guide



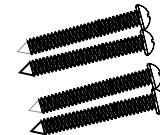
Male-to-Female
Category Jumper Cable



Tile Ceiling
Mounting Hardware



Drywall
Mounting Hardware



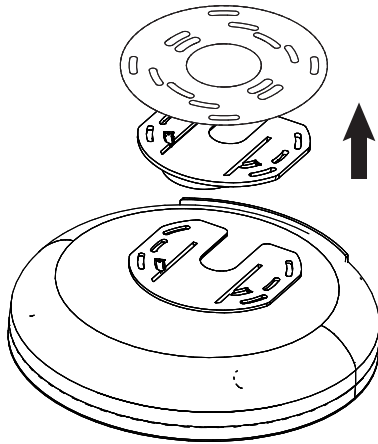
Wood Surface
Mounting Hardware
(510 has 2 screws)

*This manual uses the 810 WAP for illustrative purposes throughout.

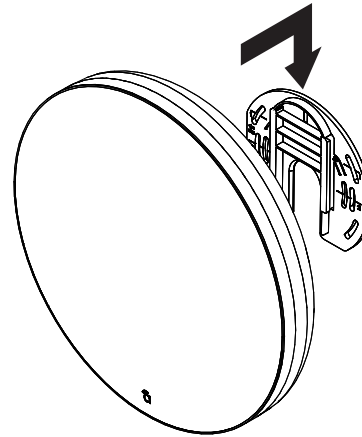


Step 2: Install

Ⓐ Ceiling Mount



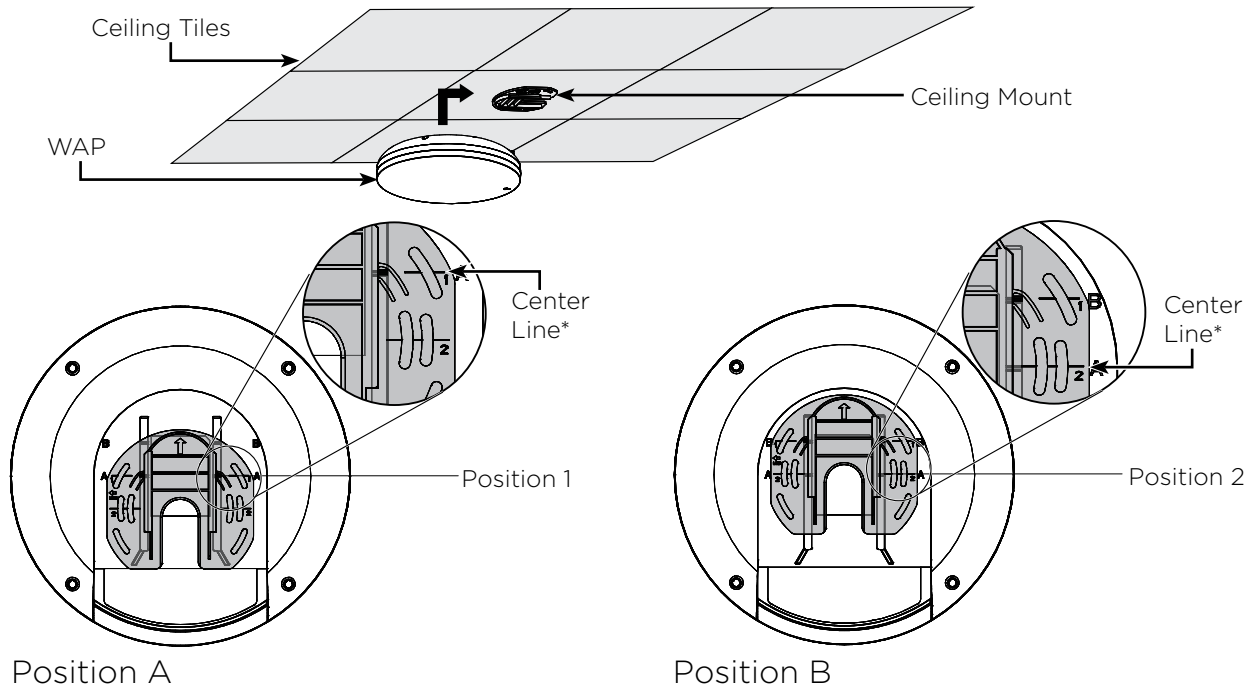
Ⓑ Wall Mount



NOTE: Use the ceiling back plate on top of acoustic ceiling tiles to prevent the mounting nuts from pulling through.



Position the Ceiling Mount



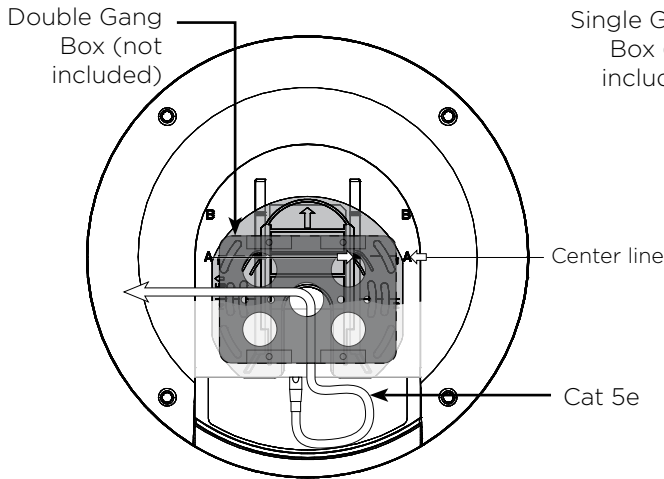
* Center line of the bracket is not necessarily the center line of the WAP when installed. Please use the guide above to understand the center line of the WAP when installing the bracket.



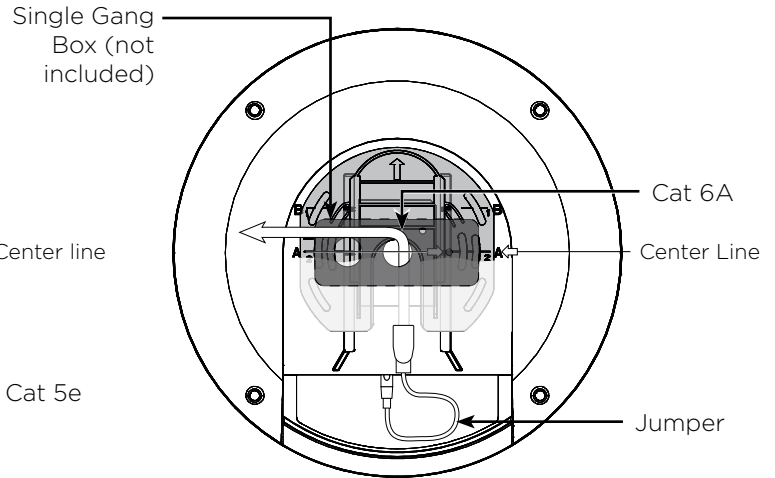
Recommended use of the Jumper Cable

You can mount your access point to the electrical box in one of two positions, shown below. These options are provided to provide cable bend relief for cables of different lengths and thicknesses. **Illustrations do not reflect pre-install steps—please run the wire or jumper prior to connecting the access point.**

Position A (810)



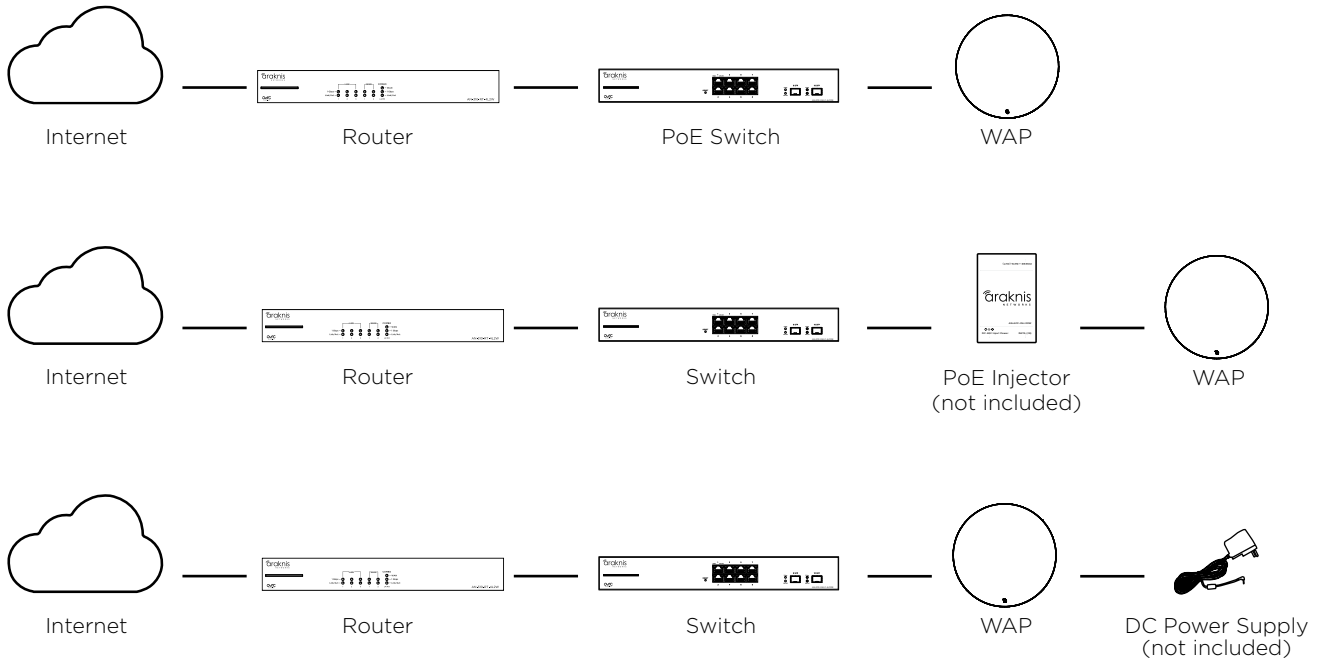
Position B (510/810)



NOTE: Jumper is needed when using Cat 6A in Position B.

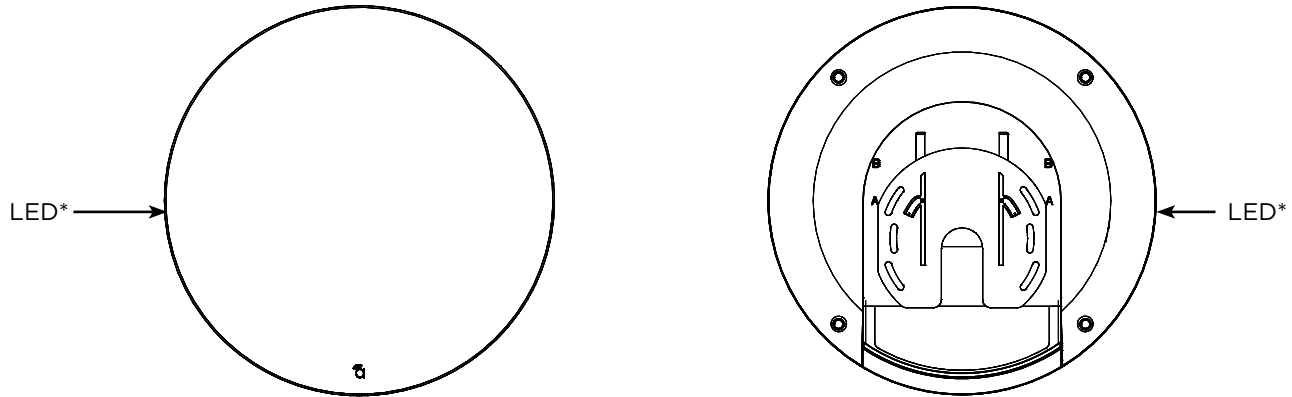


Step 3: Connect





Step 4: Verify



***NOTE:** The LED is located on the side of the device.

LED Status:

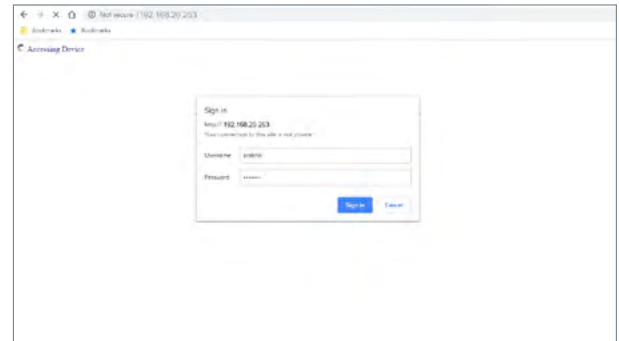
- Blinking: WAP is not working correctly. Contact Araknis technical support.
- Solid White: WAP is booting up (810 only).
- Solid Blue: WAP is operating correctly.



Step 5: Log Into Web Interface

A Log in using the default credentials:

Username	araknis
Password	araknis



NOTE: If you can't connect to the WAP using this method, or need to configure the device before connecting it to the network, try these options for accessing your device:

- DHCP IP address – Page 15
- Default IP Address – Page 16
- OvrC – Page 19



Pro Tip: Save and Apply Changes

After making changes to settings on a menu page, click the “Save” button on the menu to hold the new settings in the Apply Changes field.

SYSTEM STATUS

System Information

System Name	AN-R10-AP-LAC	
Service Tag	ST19430040W9411	
Firmware Version	3.0.01	
Management VLAN ID	UnTagged	

Wireless Information

	2.4GHz	5GHz
MAC Address	D4:6A:91:AB:B6:E2	D4:6A:91:AB:B6:E3
Number of Networks	1	1
Number of Connected Clients	1	0
Operation Mode	Access Point	Access Point
TX	3582964 Bytes	9041263 Bytes

Apply Changes

After all desired changes have been made, click “Apply Changes” to review the new settings if any. Click “Apply” to make the changes or “Revert” to cancel the changes.

APPLY CHANGES

Unsaved

Unsaved changes list

Apply Revert

NOTE: Settings will take affect after the progress bar completes 100%.



Other Access Methods: DHCP IP Address

The WAP is configured to DHCP by default so that the DHCP server can assign an IP address when the WAP is connected to the network (the DHCP server is usually the router). This address can be used for accessing the web interface.

Use one of these methods to find the IP address of the WAP:

- Check the client table on your router
- Use a network scanner (e.g. Fing) to sniff the network. The Araknis WAP manufacturer field will display “Snap AV”

See the highlighted field in the “Fing” screenshot to the right for an example of an Araknis device being identified.



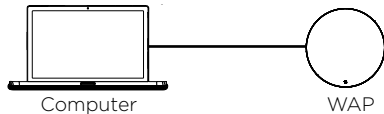


Other Access Methods: Default IP Address

If the WAP is not issued an IP address on the network, or needs to be accessed while not connected to a network, you can configure your computer's network connection to allow access using the default IP address, **"192.168.20.253"**.

Windows 7 screenshots shown for reference.

- (A) Connect your PC to the WAP using a network patch cable.
- (B) On your PC, open the Control Panel and left-click "Network and Internet".
- (C) Left-click "Network and Sharing Center".





Other Access Methods: Default IP Address

Windows 7 screenshots shown for reference.

- Ⓓ In the left bar, left-click “Change adapter settings”.
- Ⓔ Right-click the icon for the wired network connection and left-click “Properties”.
- Ⓕ Left-click to highlight “Internet Protocol Version 4 (TCP/IPv4)”, then left-click “Properties”.





Other Access Methods: Default IP Address

Windows 7 screenshots shown for reference.

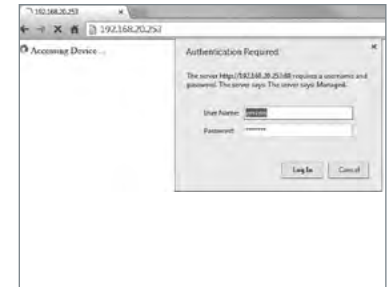
- G In the “General” tab, left-click “Use the following IP address:” and enter the IP address and subnet mask.

IP Address	192.168.20.2
Subnet Mask	255.255.255.0

- H Left-click “OK” to close Internet Protocol Version 4 (TCP/IPv4) Properties, then left-click “OK” to close wireless network connection properties.

- I Open a browser and navigate to **http://192.168.20.253/**. Log in using the default credentials:

Username	araknis
Password	araknis

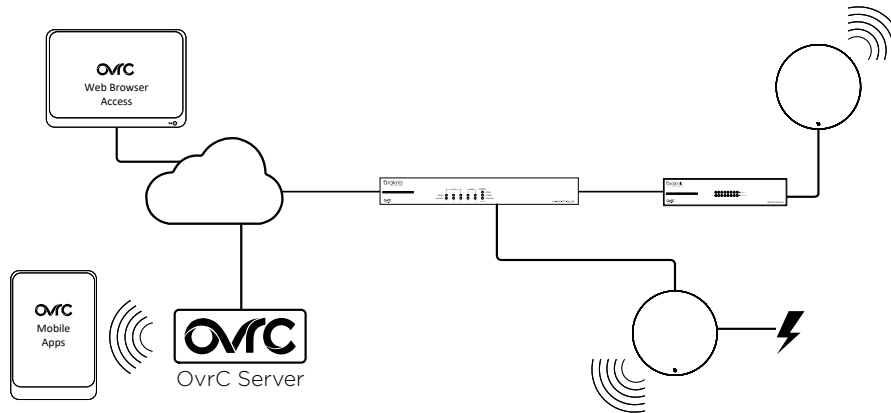




Other Access Methods: OvrC

OvrC gives you remote device management, real-time notifications, and intuitive customer management, right from your computer or mobile device. Setup is plug-and-play, with no port forwarding or DDNS address required. To add this device to your OvrC account:

- (A) Connect the WAP to the Internet
- (B) Log Into OvrC (www.ovrc.com)
- (C) Add the Device (MAC address and Service Tag numbers needed for authentication)





Specs

	AN-510-AP-I-AC	AN-810-AP-I-AC
Diameter	7.25' X 1.53"	9.25' X 1.91"
Weight	0.9 lbs	1.6 lbs
Antenna	2x2	4x4
Wireless Mode(s)	802.11 a/b/g/n/ac Wave 2	802.11 a/b/g/n/ac Wave 2
RJ-45 1000BASE-T Ports	2	2
PoE Features	PoE 802.3af Compliant PSE	PoE 802.3at Compliant PSE
PoE Consumption	Power On: 2.79W Full Load (Without USB 2.0): 6.8W Full Load (with USB 2.0): 9.8W	Power On: 7.30W Full Load (Without USB 2.0): 19.1W Full Load (with USB 2.0): 21.9W
Antennas	Embedded Antenna, Omni-Directional	Embedded Antenna, Omni-Directional
Transmit Power	Refer to the MCS Table	Refer to the MCS Table
Receiver Sensitivity	Refer to the MCS Table	Refer to the MCS Table
Antenna MIMO	2x2:2 MU-MIMO	4x4:4 MU-MIMO
PHY Data Rate	Up to 400Mbps @ 2.4GHz Up to 867Mbps @ 5GHz	Up to 800Mbps @ 2.4GHz Up to 1733Mbps @ 5GHz
Operating Frequencies	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz
Channel Bonding	Yes (20 MHz, 40 MHz, and 80MHz)	Yes (20 MHz, 40 MHz, and 80MHz)



Specs Continued

	AN-510-AP-I-AC	AN-810-AP-I-AC
Max TX Power	25dBm @ 2.4GHz 26dBm @ 5GHz	22dBm @ 2.4GHz 24dBm @ 5GHz
Wireless Features	Auto Channel Selection Operation Modes: Access Point, Repeater Multiple SSIDs: up to 8 per radio Wireless Security: WPA2-PSK (AES + TKIP), WPA-Enterprise MAC Address Filtering Hide SSID Guest Network Beamforming	Auto Channel Selection Operation Modes: Access Point, Repeater Multiple SSIDs: up to 8 per radio Wireless Security: WPA2-PSK (AES + TKIP), WPA-Enterprise MAC Address Filtering Hide SSID Guest Network Beamforming
VLAN Features	Yes, 802.1Q	Yes, 802.1Q
QoS Features	Yes, WME 802.11e	Yes, WME 802.11e
RJ45 Auto Sensing	Yes	Yes
RJ45 Auto Negotiation	Yes	Yes



Specs Continued

	AN-510-AP-I-AC	AN-810-AP-I-AC
Management Features	Web Management Telnet SNMP v1, v2c, v3 DHCP Client System Log Bonjour UPnP Remote Config File Download/Upload OvrC Services Wi-Fi Scheduler Site Survey LED Control Auto Reboot	Web Management Telnet SNMP v1, v2c, v3 DHCP Client System Log Bonjour UPnP Remote Config File Download/Upload OvrC Services Wi-Fi Scheduler Site Survey LED Control Auto Reboot
Spanning Tree	Yes, 802.1d	Yes, 802.1d
Line Voltage	12V 2A DC	12V 2A DC
Operating Temperature	32-122°F	32-122°F
Storage Temperature	-4-140°F	-4-140°F
Operating Humidity	90% or less	90% or less
Certifications	CE, FCC, IC, Wi-Fi	CE, FCC, IC, Wi-Fi



Warning



This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Contacting Technical Support

(P) (866) 838-5052

(E) techsupport@araknisnetworks.com

2-Year Limited Warranty

Araknis Networks® products have a 2-Year Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products that have been abused, modified, or disassembled. Products to be repaired under this warranty must be returned to SnapAV or a designated service center with prior notification and an assigned return authorization (RA) number.

US local representative information:

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USA
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Fax: 800.782.2410

