




Configuring continued...

If the FortiGate wireless controller's IP address cannot be determined from the methods above or if the network uses static IP addresses, do the following:

1. Connect the FortiAP to a separate private switch or hub or directly connect to your computer via a cross-over cable.
2. Change your computer's IP address to 192.168.1.3
3. Telnet to IP address 192.168.1.2. This IP address is overwritten if the FortiAP is connected to a DHCP environment. Ensure that FortiAP is in a private network with no DHCP server for the static IP address to be accessible.
4. Login with username: `admin` and no password.
5. Type the following commands to enter static IP address for Access Point, netmask & gateway information for your network. Replace zzz with the IP address of the FortiGate Wireless Controller.


```
cfg -a AP_IPADDR="xxx.xxx.xxx.xx"
cfg -a AP_NETMASK="255.255.255.0"
cfg -a IPGW="yyy.yyy.yyy.yyy"
cfg -a AC_IPADDR_1="zzz.zzz.zzz.zzz"
```
6. Save the configuration by typing the following command:


```
cfg -c .
```

 Unplug the FortiAP and plug it back in order for the configuration to take effect.
7. Move the FortiAP to the intended deployment location and connect the Ethernet cable as described in the Connecting section.
8. In FortiGate controller Web Config, go to *Wireless Controller > Configuration > Access Point*. A successfully discovered unit displays a half-filled circle symbol. 
9. Select the Access Point and click Edit.
10. In the Admin field, select Enable.
11. In the AP Profile field, select a profile from the list and click OK.

The configuration is downloaded from the FortiGate unit to the FortiAP and the Wireless LED lights up.

Note: FortiGate Low encryption units must be matched up with Low Encryption Access Points.

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.

For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.

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.

IMPORTANT NOTE: 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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

Industry Canada Statement

This device complies with RSS-210 of the Industry Canada 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.

Règlement d'Industry Canada

Les conditions de fonctionnement sont sujettes à deux conditions:

- 1) Ce périphérique ne doit pas causer d'interférence et.
- 2) Ce périphérique doit accepter toute interférence, y compris les interférences pouvant perturber le bon fonctionnement de ce périphérique.

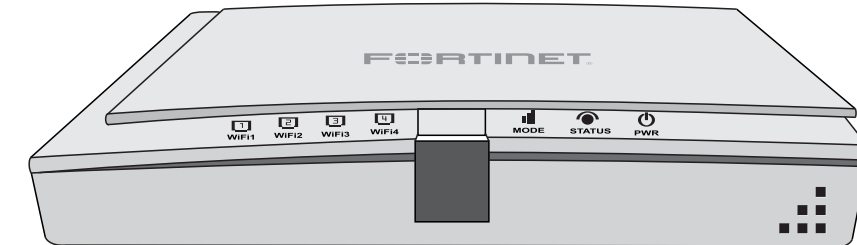
IMPORTANT NOTE: Radiation Exposure Statement

This equipment complies with IC 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.

Caution:

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

FortiAP-210B/220B



Power Required	Adaptor Input 100-240V~ 50/60Hz 0.6A Output: 12V DC 1.5A –center positive
Ports	1 x 10/100/1000 PoE (IEEE 802.3af) 1 Console/127515 1 USB 2.0
Number of radios	FortiAP-210B — 1 FortiAP-220B — 2
WiFi	802.11 a, b, g, n
Mount	Wall or ceiling

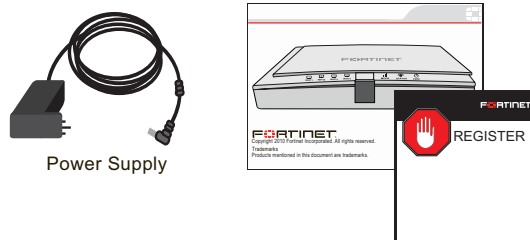
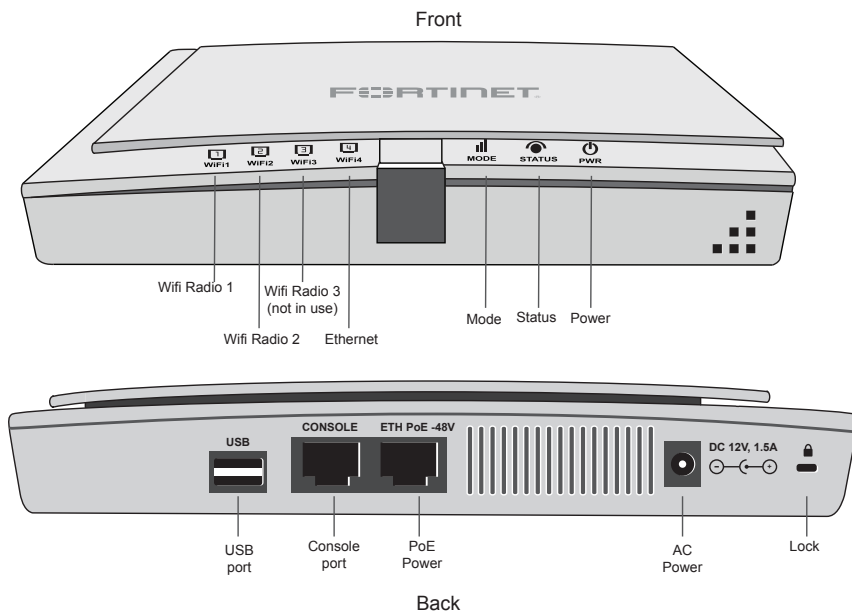
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Regulatory Compliance
FCC Class B Part 15, / CE Mark
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Package Contents



LED Description

LED	State	Description
PWR 	Green	The unit is ready and has AC power.
	Green Flashing	The unit is booting.
	Off	The unit is off.
Status 	Green	The FortiAP is being managed by the FortiGate Wireless Controller.
	Amber flashing	FortiAP has lost network connection to the FortiGate wireless controller.
	Amber	FortiGate wireless controller has been found but FortiAP is not managed.
	Off	FortiGate wireless controller has not been found.
Mode 	Green	One or more radio in Monitor mode.
	Green flashing	One or more radio in dedicated Repeater mode. To be implemented in a future release.
	Off	No mode selected.
WiFi1	Green	Radio 1 enabled.
	Green flashing	Wireless activity.
	Off	Radio 1 disabled or off.
WiFi2 (Only FortiAP-220B)	Green	Radio 2 enabled.
	Green flashing	Wireless activity.
	Off	Radio 2 disabled or off.
WiFi3	Not in use.	
ETH	Green flashing	Link activity.
	Green	Network speed of 1000 Mbps.
	Amber	Network speed of 10/100 Mbps.
	Off	Ethernet link unavailable.

Connecting

Using the provided template and two M3 screws, attach the unit to the wall or ceiling using the two mounting holes at the bottom of the FortiAP unit. If placing on desktop, attach the rubber feet to the unit.

Connect the following to the FortiAP unit:

- Insert a network cable to the ETH PoE -48V port.
 - Use straight-through cable for most equipment
 - Use cross-over cable if connecting to FortiGate units without auto MDI detect
- Insert the other end of the network cable into your LAN Ethernet edge switch, or directly to the FortiGate Controller.
- If using PoE, connect the cable to the ETH PoE -48V port.
- If not using PoE, connect the power adaptor to AC outlet and insert the power adaptor connector to the FortiAP unit.

Note: Only FortiGate-60B units or higher can act as wireless controllers.

Caution: This device complies with 802.3af PoE specification. Do not use any PoE injectors that are not 802.3af compliant as it may damage this device.

Configuring

The FortiAP is designed to require no configuration in most networks. Zero Configuration mode works if the FortiAP is directly connected to the FortiGate performing the Wireless LAN Controller (WLC) functions, or on the same layer-2 network and subnet as the FortiGate.

To enable the FortiAP using Zero Configuration:

- Connect the network and power cable as described in the Connecting section.
- Once power is applied, the FortiAP goes through boot procedure and requests an IP address from the DHCP server.
- If the IP address is retrieved successfully, the FortiAP enters discovery mode to locate a FortiGate wireless controller. The discovery modes are:
 - Broadcast
 - Multicast
 - DHCP option 138
- If this is the first time connecting the FortiAP to the controller, only the power light and Port 0 LED is lit. If the FortiAP has been pre-provisioned in the controller, the Wireless LED is also lit.
- Verify that the FortiAP has successfully connected to the controller. In FortiGate controller Web Config, go to *Wireless Controller > Configuration > Access Point*. A successfully discovered unit displays a half-filled circle symbol.
- Select the Access Point and click Edit.
- In the Admin field, select Enable.
- In the AP Profile field, select a profile from the list and click OK. The configuration is downloaded from the FortiGate unit to the FortiAP and the Wireless LED lights up.

Factory Defaults

Administrator login	
Username	admin
Password	<none>
Default port addresses	
Port 1	192.168.1.2

Interface Description

Interface	Type	Speed	Protocol	Description
Console	RJ-45	9600bps	RS-232 serial	Optional connection to the management computer. Provides access to the command line interface (CLI).
ETH PoE -48V	IEEE 802.3af	10/100/1000 Base-T	Ethernet	POE capable source port. Power requirement of 15.4 Watts.
USB	Type A		2.0	For future use.

To reset the FortiAP unit to the factory defaults, in the CLI type the command:
factoryreset