



# FortiAP 14C QuickStart Guide



April 05, 2013

20-000-195859-20130405

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# Package Contents

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Fortinet's FortiAP wireless thin access points deliver secure, identity-driven WiFi client access that creates a fortified WLAN network that is centrally managed by a FortiGate or FortiWiFi platform.

Your box contains the following:

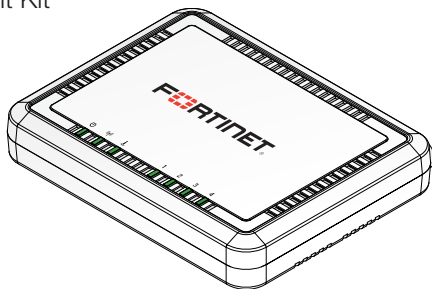
FortiAP 14C

QuickStart Guide with Wall Mount Template

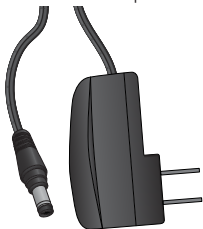
Power Adapter

Ethernet Cable

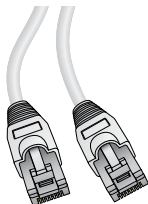
Wall Mount Kit



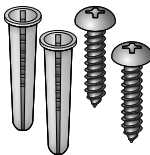
Power Adapter



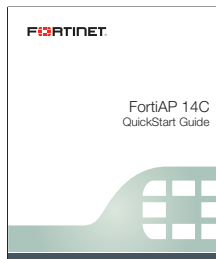
Ethernet Cable



Wall Mount Kit



QuickStart Guide



**Note:** Accessories may not be exactly as shown.

# Mounting Your FortiAP Unit

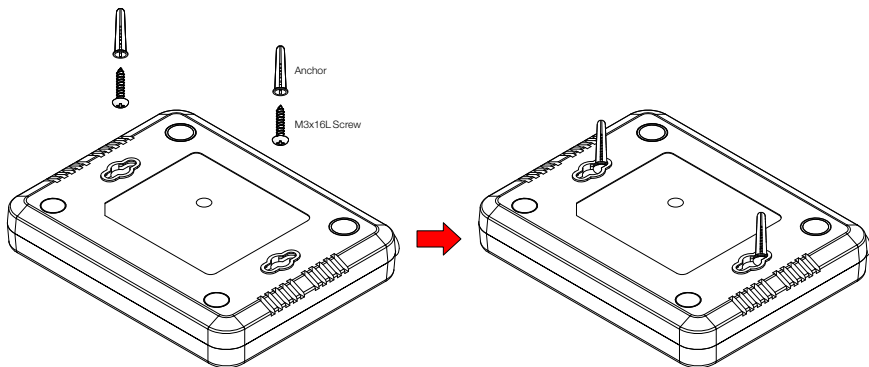
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Using the provided hardware, the FortiAP unit can be mounted on wall.

## To mount the unit on a wall:

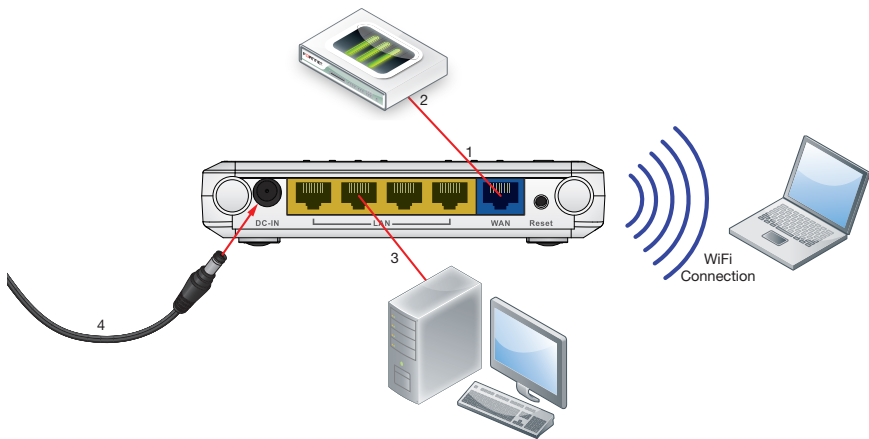
1. Select an appropriate location and mark the location on the wall where the anchors will be located.
2. Insert the anchors provided in the wall mount kit into the wall in the marked locations. If necessary, drill holes into the wall with an appropriately sized drill bit prior to inserting the anchors.
3. Screw the provided M3x16L screws into the two anchors, leaving enough of the screws exposed to ensure that the unit can be mounted on them.
4. Mount the FortiAP unit onto the screws and ensure that it is mounted securely.

You can now proceed with connecting your FortiAP unit.



# Connecting Your FortiAP Unit

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## To connect the FortiAP unit:

1. Insert the provided Ethernet cable into the WAN port on the FortiAP unit.
2. Insert the other end of the Ethernet cable into your FortiGate or FortiWiFi unit, or into the AP/Bridge port on your PoE adapter.
3. Connect an Ethernet cable to each computer you wish to connect to the FortiAP unit.
4. Insert the DC plug of the power adapter into the DC power jack on the FortiAP unit, and then insert the other end into an appropriate power outlet.

The Power LED will light up.

**Note:** This product is intended to be supplied by a Listed Direct Plug-In Power Unit marked LPS or Class 2 and rated 5V DC, 1 A.

# Configuring Your FortiAP Unit

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

If the FortiAP wireless controller's IP address cannot be determined using Zero Configuration mode, or if the network uses static IP addresses, it can be configured to use a static IP address.

## To enable the FortiAP using Zero Configuration:

1. After connecting the FortiAP unit as described in the previous chapter, the unit goes through its boot procedure and requests an IP address from the DHCP server.
2. If the IP address is retrieved successfully, the FortiAP enters discovery mode to locate a FortiGate or FortiWiFi wireless controller. The discovery modes are:
  - Broadcast
  - Multicast
  - DHCP option 138
3. Verify that the FortiAP has successfully connected to the controller. In the FortiGate Web-based Manager, go to *WiFi Controller > Managed Access Points > Managed FortiAP*. A successfully discovered unit displays an orange circle with a question mark.
4. Select the access point and click *Edit*.
5. In the *State* field, select *Authorize*.

- In the AP Profile field, select *Change*, then select a profile from the list and click *OK*.

The configuration is downloaded from the wireless controller to the FortiAP and the WiFi LED lights up.

### To enable the FortiAP with a static IP address:

- Connect the FortiAP device to a separate, private switch or hub, or directly connect it to your management computer via a cross-over cable.
- Configure the management computer to be on the same subnet as the internal interface of the FortiAP unit:
  - Browse to the *Network and Sharing Center > Change Adapter Settings > Local Area Connection Properties > Internet Protocol Version 4 (TCP/IPv4) Properties*.
  - Change the IP address of the management computer to 192.168.1.3 and the netmask to 255.255.255.0.
- To access the unit's Web-based Manager, start a browser of your choice and browse to `http://192.168.1.2`.
- Type `admin` in the *Name* field, leave the *Password* field blank, and select *Login*.
- In the *Network Configuration* section of the *System Information* tab:
  - Set *Address Mode* to *Static*,
  - Enter the FortiAP unit's IP address in the *Local IP Address* field,
  - Enter `255.255.255.0` in the *Local Network Mask* field, and
  - Enter the gateway IP address in the *Gateway IP* field.

#### Network Configuration

Address Mode	<input checked="" type="radio"/> Static <input type="radio"/> DHCP
Local IP Address	<input type="text" value="192.168.1.2"/>
Local Network Mask	<input type="text" value="255.255.255.0"/>
Gateway IP	<input type="text" value="192.168.1.1"/>
Administrative Access	<input checked="" type="checkbox"/> HTTP <input checked="" type="checkbox"/> TELNET



- In the *WTP Configuration* section, set *AC Discovery Type* to *Static* and enter the FortiGate wireless controller's IP address in the *AC IP Address 1* field.

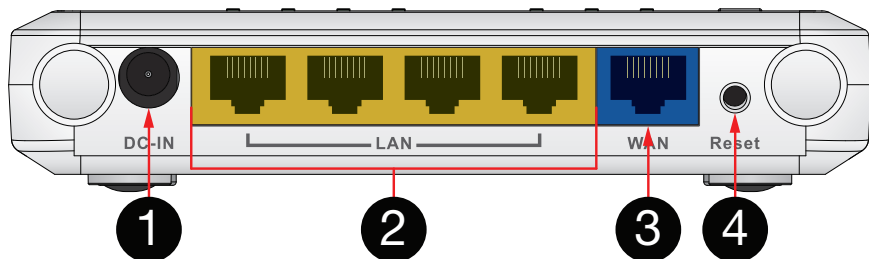
#### WTP Configuration

AC Discovery Type	<input type="radio"/> Auto <input checked="" type="radio"/> Static <input type="radio"/> DHCP <input type="radio"/> DNS <input type="radio"/> Broadcast <input type="radio"/> Multicast
AC Control Port	<input type="text" value="5246"/>
AC IP Address 1	<input type="text" value="192.168.1.1"/>
AC IP Address 2	<input type="text"/>
AC IP Address 3	<input type="text"/>
AC Data Channel Security	<input type="radio"/> Clear Text <input type="radio"/> DTLS Enabled <input checked="" type="radio"/> Clear Text or DTLS Enabled

- Apply the configuration by selecting *Apply*.
- Move the FortiAP to the intended deployment location and connect the Ethernet cable as described in the *Connecting* chapter.
- Log in to the FortiGate controller Web-based Manager, and go to *WiFi Controller > Managed Access Points > Managed FortiAP*. A successfully discovered unit displays an orange circle with a question mark in the Status column.
- Select the access point and click *Edit*.
- In the *State* field, select *Authorize*.
- In the *Edit FortiAP* dialog box, select *Enable Wireless Radio*. Leave the remaining settings at their default values. The configuration is downloaded from the FortiGate unit to the FortiAP device.

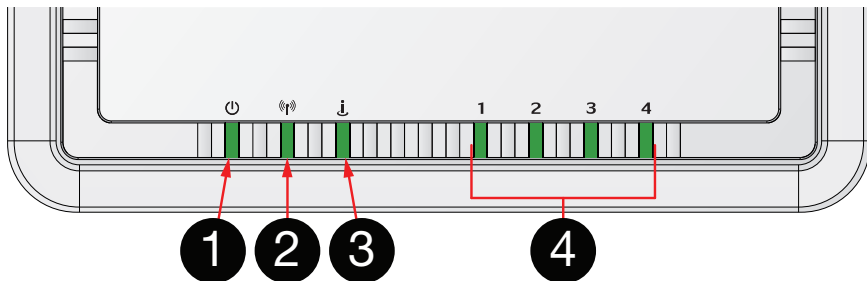
For more information, see the *Deploying Wireless Networks Guide*, available on Fortinet's technical documentation website, <http://docs.fortinet.com>.

# Technical Specifications



#	Interface	Type	Description
1	Power		5V DC, 1.0A 100-240V AC, 0.3A max, 50/60Hz adapter
2	LAN Ports	RJ-45	Fast Ethernet ports for connecting to the internal network.
3	WAN Port	RJ-45	Fast Ethernet port for connecting to a FortiGate or FortiWiFi unit, or to the Internet.
4	Reset Button		Reset the FortiAP unit to factory default settings.
	Wireless Radio	WiFi	802.11 b/g/n, single band 2.4GHz

# LED Specifications



#	LED	State	Description
1	Power	Green	The unit is on.
		Off	The unit is off.
2	WiFi	Green	Wireless radio is enabled.
		Flashing Green	Wireless activity.
		Off	Wireless interface is down.
3	WAN	Green	Ethernet link detected.
		Flashing Green	Port is transmitting and receiving data.
		Off	No link established.
4	LAN Ports 1 - 4	Green	Port is connected.
		Flashing Green	Port is transmitting and receiving data.
		Off	No link established.

# Cautions and Warnings

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Please review the following cautions and warnings.

## **Environmental and mounting specifications**

Operating temperature: 0 - 40°C (32 - 104°F)

Storage temperature: -40 - 70°C (-40 - 158°F)

Humidity: 0 to 90% non-condensing

Operating Altitude: <2250m (7400ft)

**Elevated Operating Ambient:** If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature ( $T_{ma}$ ) specified by the manufacturer.

**Circuit Overloading:** Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

This product is intended to be supplied by a Listed Direct Plug-In Power Unit marked LPS or Class 2 and rated 5V DC, 1A.

## **Federal Communication Commission (FCC) – USA**

This device complies with Part 15 of 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 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 residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it 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 or more 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.

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

### **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 and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**Caution:** Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

### **Industry Canada Equipment Standard for Digital Equipment (ICES) – Canada**

CAN ICES-3 (B) / NMB-3 (B)

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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

### **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.

### **Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition aux rayonnements IC 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.

**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. High-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

**Avertissement:** Les dispositifs fonctionnant dans la bande 5 150-5 250 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. De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

## **European Conformity (CE) - EU**

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

## **Grounding**

Ensure your Fortinet product is connected and properly grounded to a lightning and surge protector. WAN or LAN connections that enter the premises from outside the building should be connected to an Ethernet CAT5 (10/100 Mb/s) surge protector.

Shielded Twisted Pair (STP) Ethernet cables should be used whenever possible rather than Unshielded Twisted Pair (UTP).

Do not connect or disconnect cables during lightning activity to avoid damage to your Fortinet product or personal injury.

Electrostatic discharge (ESD) can damage Fortinet equipment. Only perform the procedures described in this document from an ESD workstation. If no such station is available, you can provide some ESD protection by wearing an anti-static wrist strap and attaching it to an available ESD connector or other bare metal object.

**Caution:** For devices that contain a battery there is a risk of explosion if battery is replaced by an incorrect type. Recycle used batteries according to your local regulations.

# Documentation and Links

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The following Fortinet web pages provide information and resources for your Fortinet product:

**1. Customer Service & Support:** <https://support.fortinet.com>

On this page you can create a support account with Fortinet, register and manage your products, download updates, firmware images and release notes, and create technical support tickets.

**2. Technical Documentation:** <http://docs.fortinet.com>

This page provides the most up-to-date versions of Fortinet publications for the entire family of Fortinet products.

**3. Knowledge Base:** <http://kb.fortinet.com>

This page provides Fortinet technical documentation, such as troubleshooting, how-to articles, example configurations, FAQs, technical notes, and more.

**4. Technical Discussion Forums:** <https://support.fortinet.com/forum>

This page allows you to communicate with other customers and Fortinet partners about Fortinet products, services, and configuration issues in a forum environment.

**5. Training Services:** <http://training.fortinet.com>

This page provides course descriptions, availability, schedules, and locations of training programs in your area.

**6. FortiGuard Threat Research and Response:** <http://www.fortiguards.com>

This page provides up-to-date information on vulnerabilities and threats, and includes a virus scanner, Internet Protocol (IP) signature look-up, web filtering tools, and related information.

## Tools and Documentation CD

The tools and documents on this CD are current as of shipping time.

## Comments on Technical Documentation

Please send comments or information about any errors or omissions in this or any Fortinet technical documents to [techdoc@fortinet.com](mailto:techdoc@fortinet.com).

# Register Your Product

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If you did not yet register your Fortinet product, please register your product now.

## Register

Register your Fortinet product in order to receive:

- Technical Support
- New product features
- Protection from new threats

## Enregistrer

Vous devez enregistrer le produit pour recevoir:

- Support technique
- Nouvelles fonctionnalités du produit
- Protection contre de nouvelles menaces

## Registra

La reistrazione ti permette di usufruire di:

- Supporto Tecnico
- Nuove funzionalita
- Protezione dalle ultime minacce

## Registrar

Debe registrar el producto para recibir:

- Apoyo técnico
- Nuevas funcionalidades del producto
- Protección contra ataques

## 登録のお願い

本日、フォーティネット製品の登録をしてください。

登録すると次のメリットがあります。

テクニカルサポート・新機能の追加・新しい脅威への防御

## 请马上注册

您的飞塔产品

您在注册以后才能得到技术支持、新产品特点信息、最新威胁防护

**Web: <https://support.fortinet.com/>**

**Toll free: 1 866 648 4638**

**Phone: 1 408 486 7899**

**Fax: 1 408 235 7737**

**Email: [register@fortinet.com](mailto:register@fortinet.com)**



# Product License Agreement

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

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