

cnPilot™ E410 Indoor 802.11ac Wave2 Indoor Access Point Quick Start Guide



Model: e410

Introduction

The guide provides a quick installation process.

Package Contents

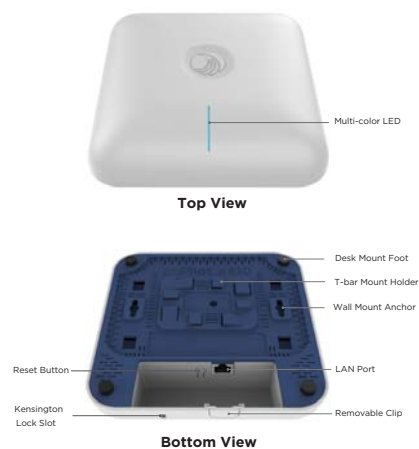


Tools Required

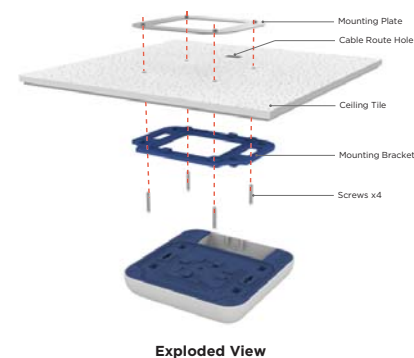
- Philips Screwdriver

* Only available for certain ordering SKUs

Product Overview

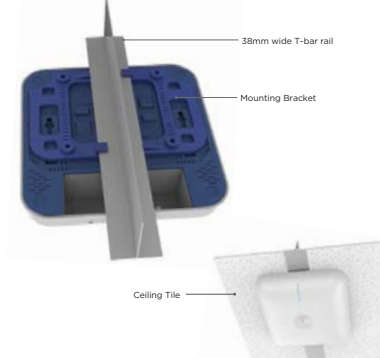


Ceiling Tile Mounting



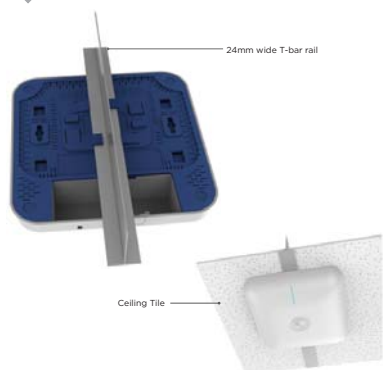
The e410 mounts to a ceiling tile and allows for the ethernet cable to be hidden by routing through a hole in the ceiling tile.

38mm T-Bar Rail Mounting



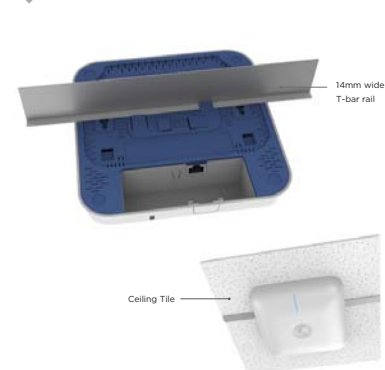
The e410 is secured to a 38mm ceiling T-bar rail by using the ceiling mount bracket.

24mm T-Bar Rail Mounting



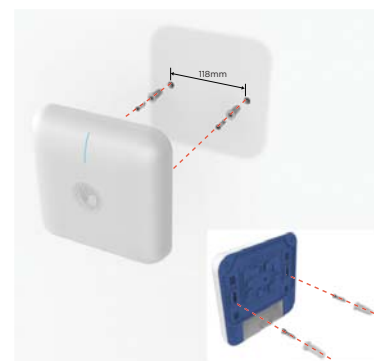
The e410 can be mounted to a 24mm width T-bar rail using the clips built into the underside of the unit.

14mm T-Bar Rail Mounting



The e410 can be mounted to a 14mm width T-bar rail using the clips built into the underside of the unit.

Wall Mounting



The e410 mounts to any wall by using two screws with corresponding wall anchors.

Rubber feet Assembly



The e410 can be mounted on any surface by attaching the rubber feet to the underside of the unit.

Powering Up

1. Connect the Ethernet cable from Eth1/PoE-IN of e410 to the PoE port of Gigabit Data + Power.
2. Connect an Ethernet cable from your LAN or Computer to the Gigabit Data port of the PoE adapter.



3. Connect the Power Cord to the adapter, and then plug the Power Cord into a power outlet.



Once powered ON -- Power LED should illuminate continuously on PoE Adapter.

Configure Management PC

1. Select Properties for the Ethernet port. In Windows it is found in Control Panel > Network and Internet > Network Connections > Local Area Connection.



2. IP Address Configuration
Default IP address received via DHCP.
cn Pilot e410 will use a default static IP address of 192.168.0.1, if there is no DHCP server



3. Default Login Information
- Username: admin
- Password: admin

Management Protocols enabled by default -http or https (webpage management interface access), SSH (CLI management interface access).

AP Management

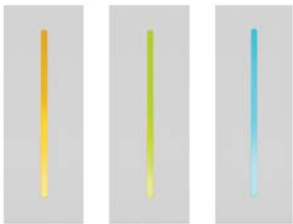
The cnPilot e410 Access Point supports multiple modes of management:

Standalone: The Access Point can be managed directly from its GUI by selecting the 'Configure' tab on the menu, and setting up a wireless LAN.

Controller : The Access Point can be onboarded to cnMaestro network controller system, either on-premises or the cloud version at <https://cloud.cambiumnetworks.com>.

For management from cloud please ensure the AP has connectivity to the internet. Connectivity can be verified using tools such as ping from the 'Troubleshooting' tab of the Access Point GUI. Connection status can be monitored from the AP dashboard.

Hardware Overview



LED Color

Amber

Green

Blue

Status Indicator

Access Point is powering up and initializing

Access Point is in service.

Access Point is managed with cnMaestro or autopilot.

Hardware Overview



Bottom View

Reset

The Reset button serves two functions for e410:

- To restart, press and release the Reset button quickly.
- To restore to factory default settings, press and hold the Reset button for more than 10 seconds.

LAN Port

The Main port is a Gigabit Ethernet port used to connect the power and should be connected to the LAN and DHCP server.

Specifications

Model: e410																			
Product Dimensions	170 x 170 x 41 mm 6.7 x 6.7 x 1.6 inch																		
Product Weight	0.384 kg 0.84 lb																		
Operating Frequency	CE & C-lick: 2412-2472, 5180-5240, 5260-5320, 5500-5700, 5745-5825 MHz FCC & IC: 2412-2462, 5180-5240, 5260-5320, 5500-5700, 5745-5825 MHz																		
Networking Interface	RJ45 10/100/1000 Mbps Ethernet																		
Antenna Gain	<table><tr><th>Antenna</th><th>Gain (dBi)</th><th>Beam Width</th><th>Beam Width</th><th>Beam Width</th><th>Beam Width</th></tr><tr><td>1</td><td>2.1</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td></tr><tr><td>2</td><td>2.1</td><td>1.0</td><td>1.0</td><td>1.0</td><td>1.0</td></tr></table>	Antenna	Gain (dBi)	Beam Width	Beam Width	Beam Width	Beam Width	1	2.1	1.0	1.0	1.0	1.0	2	2.1	1.0	1.0	1.0	1.0
Antenna	Gain (dBi)	Beam Width	Beam Width	Beam Width	Beam Width														
1	2.1	1.0	1.0	1.0	1.0														
2	2.1	1.0	1.0	1.0	1.0														
Power Supply	56V/75W Gigabit PoE Injector or 802.3af PSE																		
Antenna	Two Dual Band Omnidirectional																		
WiFi Standards	802.11a/b/g/n/ac Wave 2																		
Wireless Security	WPA2 Pre-shared Keys, WPA2 Enterprise																		
Operating Modes	Wireless Client Connectivity, Mesh																		
Mounting	Ceiling tile, T-bar, Desktop, Wall																		
Operating Temperature	0° to 50° C																		
Operating Humidity	5 ~ 95% Noncondensing																		
Certification	CE, FCC, IC																		

Safety Notice

Warning:

To prevent loss of life or physical injury, observe the following safety guidelines. In no event shall Cambium Networks be liable for any injury or damage caused during the installation of e410 platform. Ensure that only qualified personnel install. Only use attachments/accessories specified by the manufacturer.

Electrical Safety Information

1. Compliance with manufacturer's label for voltage, frequency, and current requirements. Connecting to a different power source than those specified may result in improper operation, damage to equipment or pose a fire hazard if the limitations are not followed.
2. There are no serviceable parts inside this equipment. Service should be provided only by a qualified service technician.
3. This equipment is provided with a detachable power cord which has an integral safety ground wire intended for connection to a grounded safety outlet.
 - a. Do not substitute the power cord with one that is not the provided approved type. Never use an adapter plug to connect to a 2-wire outlet as this will defeat the continuity of the grounding wire.
 - b. The equipment requires the use of the ground wire as a part of the safety certification, modification or misuse can provide a shock hazard that can result in serious injury or death.
4. Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment.
5. Protective earthing is provided by Listed AC adapter. Building installation shall provide appropriate short-circuit backup protection.
6. Protective bonding must be installed in accordance with local national wiring rules and regulations.
7. Be aware that the unit surfaces can become very hot to the touch so do not handle the device when it is running for long periods of time. Turn off power to the device first for a few minutes and then handle the unit carefully.

FCC Compliance

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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.

For product available in the USA/Canada market, only channel 1-11 can be operated. Selection of other channels is not possible. This device is restricted for indoor use.

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 20 cm between the radiator & your body.

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.

IC Statement:

This device complies with Industry Canada license-exempt RSS standard(s). 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.

FCC Compliance

For product available in the USA/Canada market, only channel 1-11 can be operated. Selection of other channels is not possible. 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.

Dynamic Frequency Selection (DFS) for devices operating in the bands 5250-5350 MHz, 5470-5600 MHz and 5650-5725 MHz. Sélection dynamique de fréquences (DFS) pour les dispositifs fonctionnant dans les bandes 5250-5350 MHz, 5470-5600 MHz et 5650-5725 MHz.

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. 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.

For indoor use only.
Pour une utilisation en intérieur uniquement.

IMPORTANT NOTE:
IC Radiation Exposure Statement:
This equipment complies with IC RSS-102 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. 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.

This radio transmitter has been approved by FCC to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Antenna Information: Two dual-band antenna, Max. Gain 5.24/5.47dBi



RoHS/WEEE Compliance

Caring for the Environment: RoHS/WEEE

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.



CE Marking

CE marking on this product represents the product is in compliance with all directives that are applicable to it.



Online Resources

User Guide and software downloads:
<https://support.cambiumnetworks.com/files/e410/>

Support:
<http://www.cambiumnetworks.com/support/>

Contact us:
<http://www.cambiumnetworks.com/support/contact-support/>