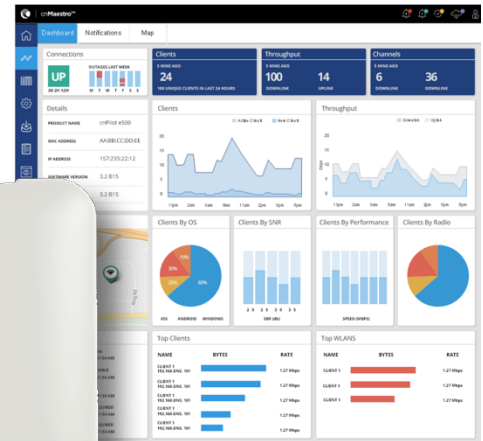


# cnPilot™ E410 Indoor

802.11ac wave 2 dual band 2x2 Indoor access point

The compact low profile 802.11ac Wave 2 Multi-user MIMO (MU-MIMO) beamforming, high speed E410 Enterprise access point future proofs your Indoor access point deployments and is perfect for Schools, Indoor public spaces, Malls, Hotels and Resorts (Hospitality), Coffee shops, Multi-dwelling units (MDUs) or just about any place indoor that needs reliable high performing access points



## CONTROLLER MANAGED + AUTONOMOUS

Managed by Cambium's cnMaestro™ cloud controller or On-premises controller, the cnPilot E410 management includes:

- Zero touch onboarding • Inventory tracking • Monitoring
- Mass Configuration • Dashboard views with Alarms • Mass upgrade • Troubleshooting • Hierarchical device organization

## CONTROLLER-LESS ROAMING. POWERFUL SIMPLICITY

The E410 supports seamless roaming for up to 1,000 clients without needing a controller in the network! Hotspot portal hosting on the AP itself offers controller-less simplicity.

## MONETIZE: VOUCHERS. SOCIAL LOGIN

Monetize your Wi-Fi service: cnMaestro's **Guest access** feature supports splash page hosting, social login and payment gateway. All built-in power packed features available right on the controller! These features along with the ability to create time, rate and volume limited traffic profiles along with vouchers for temporary guest access makes the E410 ideal for Hotels, Coffee shops, Campgrounds, and Office guest Wi-Fi.

## SERVICE AWARE WLANS. BETTER USER EXPERIENCE

Nothing is more frustrating than connecting to an Access point, but not getting to the Internet! When connection to a critical resource such as an external Gateway or AAA is down, the E410 can turn off the impacted SSIDs enabling client devices to select a different working neighboring Access point.

## INDOOR/OUTDOOR WI-FI MESH. FLEXIBILITY

Indoor meshing across multiple E410s or Indoor/Outdoor meshing across the Indoor E410 and the Outdoor E500 offers a convenient way to easily expand Wi-Fi coverage without wires.

## COVERAGE, CAPACITY. SPEED

The plenum rated E410, packs a max transmit power of 25 dBm, and is DFS certified to make use of additional reserved 5GHz DFS channels, offering more flexibility than ever for both coverage and capacity. Throughput management via Airtime fairness, increased performance by Automatic channel scanning (ACS), and higher client device speeds from Band steering ensure your network can adapt to the dynamics of ever changing client behaviors.

## HIGH DENSITY, HIGHLY AVAILABLE

A capacity of 256 max concurrent client associations, and 16 SSIDs, along with dual on-board Active/Standby memory banks ensure the E410 combines high density with high availability.

## LICENSE FREE HIGH PERFORMANCE. ONE LOW PRICE.

The 802.11ac wave 2 E410 comes with a free controller, and no AP management license fees. No hidden charges. Affordable.

## SPECIFICATIONS

### ACCESS POINT SPECIFICATIONS

Standards	IEEE 802.11a/b/g/n/ac Wave 2 Others: 802.11 h/d/r/u/w/
MIMO Streams	2x2 MIMO streams.
Range	180 m (650 Ft)
Concurrent Clients	256
Max Data Rates	1.3 Gbps (1,267 Mbps)
SSID	16 SSIDs across 2 radios
Antenna gain	4.55 dBi (2.4 GHz)/4.25 dBi (5 GHz)
Multi-Hop Mesh	Yes. Supported on Indoor & Outdoor access points. Mesh auto-recovery supported
Polarization	Dual-linear
Antenna Coverage	Omni (360°)

Ethernet Ports	One (1) x 1 Gigabit Ethernet (10/100/1000 Mbps)
Frequency bands	2.4 GHz: 2400-2484 MHz 5 GHz: 5150-5850 MHz with DFS band support
Power Supply	Standard 802.3af injector (supplied) or any PoE switch
Power Consumed	13W (max)
Dimensions	170 x 170 x 41 mm (17 x 17 x 4.1 cm)
Weight	384grams (0.384kg)
Temperature	0°C to +50°C
LED	Single LED window with tri color (Amber, Blue, Green) display
Max TX Power	+25 dBm
Physical Lock	Kensington key hole

### WI-FI FEATURES

Controller modes	<ul style="list-style-type: none"> <li>Autonomous Controller-less operations (E.g.: roaming)</li> <li>Cloud Managed</li> <li>On-premise virtualized controller</li> </ul>
Secure WLAN	WPA-TKIP, WPA2 AES, 802.1x 802.11w (Protected Management Frames)
Hotspot 2.0/Passpoint	Yes
Captive Portal/ Guest Access	<ul style="list-style-type: none"> <li>cnMaestro Controller</li> <li>Stand-alone AP based</li> <li>Redirection to external RADIUS Server</li> <li>Active Directory Integration</li> </ul>
Authentication	Secure Web page, RADIUS based 802.1x including EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, and EAP-TLS MAC authentication (local database or External RADIUS server)
Accounting	Yes. Supports RADIUS based accounting to multiple AAAs
Scheduled SSID	Turn SSID ON/OFF on a daily/weekly/time of day basis
VLAN	Dynamic VLAN assignment from RADIUS server. VLAN per SSID per user, VLAN load balancing
Data Limiting	Dynamic rate limiting of client traffic per SSID & per client
Subscriber QoS	WMM
Client Isolation	Yes
Controller-Less Fast Roaming	Yes. 802.11r, Opportunistic Key Caching supports Enhanced roaming Disconnect for sticky clients
Airtime Fairness	Yes
Meshing	Multi-hop meshing supported (3)

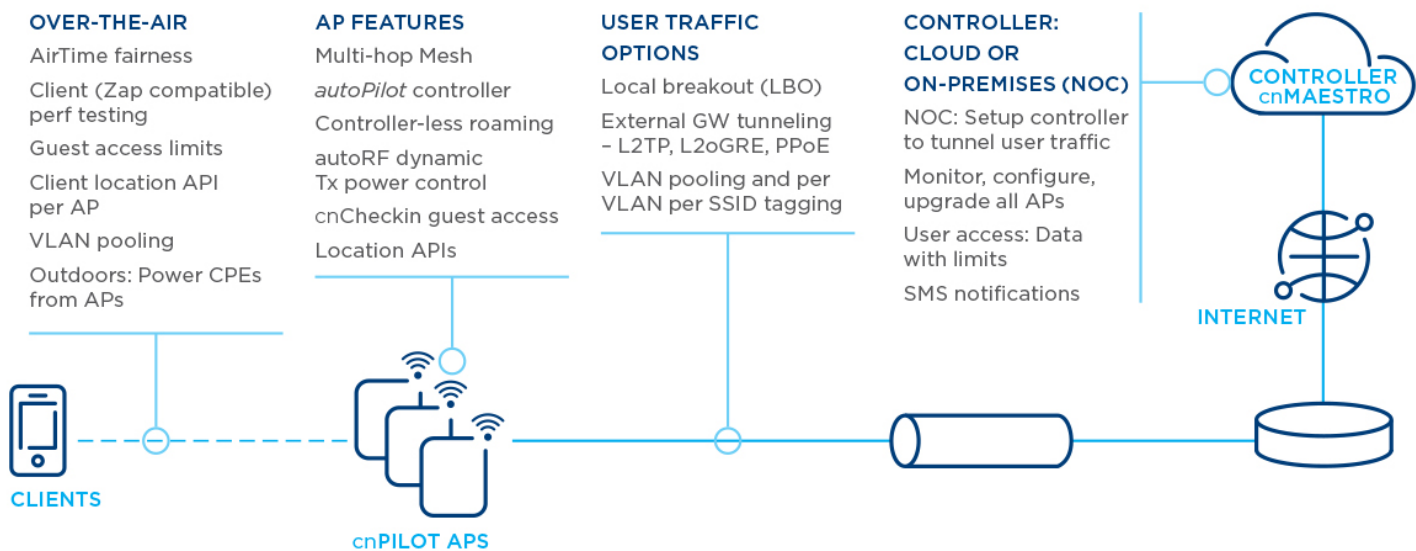
ACS: Automatic Channel Selection	Yes. Set at start or run periodically
NAT	Yes
DHCP Server	Yes
Firewall	Yes. NAT logging
ACL, DNS-ACL	Yes. L2, L3 or DNS based access control
Band Steering Band Balancing	Yes
Airtime Fairness	Yes
Tunneling	<ul style="list-style-type: none"> <li>L2TP</li> <li>L2oGRE</li> <li>PPPoE</li> </ul>
Tools	<ul style="list-style-type: none"> <li>Packet capture</li> <li>Wireless Sniffer</li> <li>IP connectivity</li> <li>Tech support (logs)</li> <li>Wi-Fi analyzer</li> </ul>
Services	NTP server config Syslog servers SNMP traps support DNS proxy cnPilot's critical resource service awareness feature reacts to the health of an external Gateway or AAA and turns SSID ON/OFF
APIs	Presence Locationing API
Certifications	FCC, ETSI, CE EN 60601-1-2 (Medical EMC) UL2043 Plenum rated

### cnMAESTRO WI-FI CONTROLLER

Cloud & On-Premises	Available in the Cloud or as a downloadable VMware® image (On-premises)
Common Manager	Manage both cnPilot and Cambium's ePMP and PMP 450 radios
Troubleshooting	Single screen wireless view, showing Wireless backhaul, Access point & clients
Frictionless On-Boarding	Secure large scale bulk onboarding Zero touch bulk configuration and provisioning
Device Inventory	Inventory tracking and reporting
Monitoring	Insightful status monitoring; rich visibility to device lifecycle Alarms and events management – Critical/Major/Minor Statistics graphs and table display Alarm traffic light display

Key Stats Monitoring	7 day historic stats
Portal Hosting	Setup Hotspot portals segmented by SSIDs
Voucher	Time and Rate limited Guest access portals with Vouchers for 1,000 client devices
Social Login	Facebook, Google
Site Grouping	Group sets access points for convenient management
Client Insight	Shows client history with aggregate client manufacturer views
Multiple Admins	Multiple admin provisioning per account
Software Upgrade	Ability to upgrade multiple WiFi devices at a time

**THE ADAPTIVE CNPILOT NETWORK**



**OVER-THE-AIR**

- AirTime fairness
- Client (Zap compatible) perf testing
- Guest access limits
- Client location API per AP
- VLAN pooling
- Outdoors: Power CPEs from APs

**AP FEATURES**

- Multi-hop Mesh
- autoPilot controller
- Controller-less roaming
- autoRF dynamic
- Tx power control
- cnCheckin guest access
- Location APIs

**USER TRAFFIC OPTIONS**

- Local breakout (LBO)
- External GW tunneling - L2TP, L2oGRE, PPOE
- VLAN pooling and per VLAN per SSID tagging

**CONTROLLER: CLOUD OR ON-PREMISES (NOC)**

- NOC: Setup controller to tunnel user traffic
- Monitor, configure, upgrade all APs
- User access: Data with limits
- SMS notifications

Ordering Information: The cnPilot E410 Indoor 802.11ac WAVE 2 Access point. Available in models with and without PoE Injectors

Regulatory Model Number (common to all SKUs): cnPilot™ E410 Indoor

Sales part #s (examples)	Description
PL-E410PUSA-US	E410 with PoE injector for USA. Similarly PL-E410PEU-EU: ETSI (EU) for EU & PL-E410PXXA-RW: Rest of the world (ROW) certified versions
PL-E410X00A-ROW	E410 No PoE injector for EU

Other country specific SKUs are also available Please contact an authorized Cambium cnPilot distributor for more details or see Cambium Partner portal for list of SKUs

Discover more information on cnPilot at: <http://community.cambiumnetworks.com/>