



cnPilot™ E410 Indoor

802.11ac wave 2 dual band 2x2 indoor access point

Future proof your indoor deployments with the compact, low profile, 802.11ac Wave 2 Multi-user MIMO (MU-MIMO) beamforming, high-speed E410 Enterprise Access Point. The E410 is perfect for schools, malls, hotels, resorts, coffee shops, multi-dwelling units (MDUs), or any indoor environment that needs reliable, high performance 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 & upgrade
- Dashboard views with alarms
- 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 with cnMaestro's Guest Access capabilities that support splash page hosting, social login, temporary access vouchers, and payment gateway. These features – along with the ability to create time, rate and volume-limited traffic profiles – make the E410 ideal for hotels, coffee shops, campgrounds, and office guest Wi-Fi.

SERVICE AWARE WLANS FOR BETTER USER EXPERIENCE

Make sure that every connection to an access point is successful. When service 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 redirect to a functional, neighboring access point.

INDOOR/OUTDOOR WI-FI MESH. FLEXIBILITY

Indoor meshing across multiple E410s, or Indoor/Outdoor meshing across both the Indoor E410 and the Outdoor E500, offers convenient options to wirelessly expand WiFi coverage.

COVERAGE, CAPACITY. SPEED

The plenum-rated E410 packs a max transmit power of 25 dBm and is DFS certified to utilize additional reserved 5 GHz 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 dynamic client behaviors.

HIGH DENSITY, HIGHLY AVAILABLE

A capacity of 256 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. There are no hidden charges.

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	867 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"> Autonomous Controller-less operations (E.g.: roaming) Cloud Managed On-premise virtualized controller
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"> cnMaestro Controller Stand-alone AP based Redirection to external RADIUS Server Active Directory Integration
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"> L2TP L2oGRE PPPoE
Tools	<ul style="list-style-type: none"> Packet capture Wireless Sniffer IP connectivity Tech support (logs) Wi-Fi analyzer
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

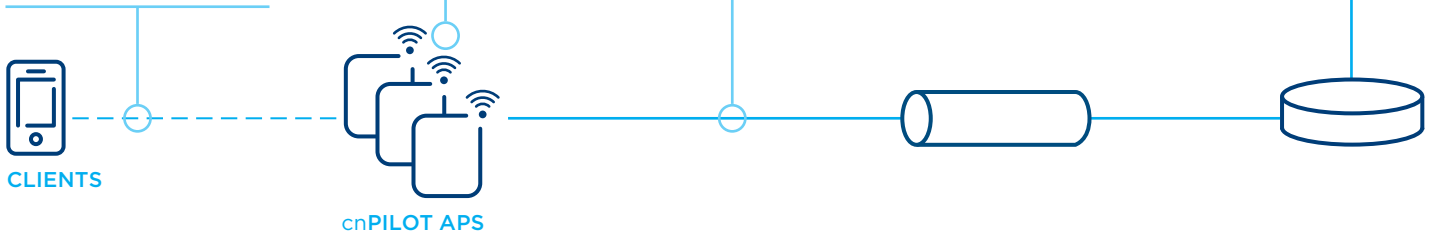
Multi-hop Mesh
autoPilot controller
 Controller-less roaming
 autoRF dynamic Tx power control
 cnCheckin guest access
 Location APIs

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-E410P<US/EU/XX>-A-<US/EU/RW>	E410 with PoE injector: PL-E410PUSA-US: FCC model, IC PL-E410PEU-EU: ETSI (EU) PL-E410PXXA-RW: ROW certified versions
PL-E410X00A-<US/EU/RW>	E410 No PoE injector. FCC/ETSI (EU)/IC/ROW certified versions
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/	