

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 – perfect for schools, malls, hotels and resorts (Hospitality), 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 and configuration
- 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 2,048 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, schools, 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 Enterprise APs, offers convenient options to wirelessly expand Wi-Fi coverage.

COVERAGE, CAPACITY. SPEED

The plenum-rated e410 packs a max transmit power of 25 dBm and is DFS certified to utilize additional reserved 5GHz DFS channels – offering more flexibility than ever for both coverage and capacity. Throughput management via Airtime fairness, increased performance by Automatic RF management (AutoRF), 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 AT A LOW PRICE

The 802.11ac wave 2 e410 comes with a free controller and no AP management license fees. No hidden charges. Affordable.

WARRANTY

Limited Lifetime Warranty.

SPECIFICATIONS

Access Point Specifications

Standards	IEEE 802.11a/b/g/n/ac Wave2 IEEE 802.11d/e/h/i/k/r/u/v/w Modulation: BPSK, QPSK, CCK, 16/64/256-QAM Radio modes : DSSS, OFDM	Frequency Bands	2.400 to 2.2484 GHz <i>(Country-specific limits apply, some bands require DFS)</i> 5.150 to 5.250 GHz 5.250 to 5.350 GHz 5.470 to 5.725 GHz 5.725 to 5.850 GHz
MIMO, Streams	2x2:2 MU-MIMO	Power Supply	802.3af PoE Injector, or PoE switch powered
Beamforming	Supported	Dimensions	17.0 x 17.0 x 4.1 cm (6.7 x 6.7 x 1.61 Inch)
Channel Width	20MHz, 40MHz, 80MHz	Weight	384 g (0.86 lb)
Concurrent Clients	256	Operating Temperature	0°C to +50°C (+32°F to +122°F)
SSIDs	16 SSIDs across 2 radios	Operating Humidity	10% to 95% non-condensing
Transmit Power <i>(conducted total)</i>	2.4GHz : 24dBm 5GHz : 25dBm	Power Consumed	13W (max)
Antenna Gain	2.4GHz : 5.25dBi 5GHz : 5.5dBi	LED	Tri-color software controlled LED
Max Data Rate	2.4GHz : 400Mbps 5GHz : 867Mbps	Secure Mounting	Kensington Key Slot
Antenna	Dual linear-polarized, Omnidirectional, integrated	MTBF	1,507,537 hrs at 50°C, 4,431,480 hrs at 25°C
Ethernet Ports	One auto-sensing Auto MDIX Gigabit Ethernet (10/100/1000 Mbps) RJ45 port	Reset Button	Supported
Radio Features	Maximum ratio combining (MRC) Cyclic delay/shift diversity (CDD/CSD) Space-time blocking coding (STBC) Low-density parity check (LDPC) Packet Aggregation: A-MPDU, A-MSDU	Certifications	FCC, CE, IC, UL, EN60601-1-2 (Medical EMC), UL2043 Plenum WEEE/RoHS compliance
Wi-Fi Alliance	Wi-Fi certified a/b/g/n/ac WPA2 – Enterprise, Personal WMM, Passpoint [†] Test and WiFi Alliance approval in Progress	Mounting Options	Wall and Ceiling mount bracket. Desktop option. T-Bar bracket supporting: 14mm, 24mm, 38mm.

Wi-Fi Features

Management Modes	cnMaestro cloud managed cnMaestro on-premises VM controller managed Autopilot (AP as controller for up to 32 AP network) Standalone with AP GUI (http/https), CLI (telnet/ssh)	Wireless Security	WPA-TKIP, WPA2-AES, 802.11i WPA-PSK, WPA2-PSK, WPA2-Enterprise 802.1x Authentication with various EAP types (EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, EAP-AKA, EAP-AKA', EAP-FAST Protected Management Frames (802.11w)
RF Management	AutoRF automatically manages channel and power	Dynamic SSID Service	by time/date, by monitored host.
Guest Access Captive Portal	cnMaestro Controller Portal Integrates with 3 rd party Guest Access Portals Built-in Portal on AP LDAP & RADIUS authentication Walled Garden with DNS whitelist	MAC Authentication	On-AP MAC filtering list. On-Controller MAC filtering list. RADIUS MAC Authentication. MAC Authentication fallback to Captive Portal
Rate Limiting	Per-client, Per-WLAN static and dynamic rate limiting	Firewall	Layer-2, Layer-3 and DNS ACL. DoS Protection.
Client Isolation	On AP, Network-wide.	3G/4G/LTE Offload	Passpoint (Hotspot 2.0)
Fast Roaming	802.11r, Opportunistic Key Caching, Enhanced Roaming	DHCP Relay	Supported, with Option-82 customization
Airtime Management	Airtime Fairness, Band Steering, Band Balancing	External NMS Monitoring	SNMP v1, v2c, v3
AAA Support	RADIUS Authentication, Accounting, Dynamic Authorization (CoA, DM). Server failover, load-balancing	Client APIs	Client Presence/Location API DNS, NAT and TCP Connecting Logging
QoS	802.11e/WMM QoS. DSCP/ToS mapping.	Time Synchronization	Auto (from controller), NTP
Ethernet (L2) Services	802.1p/802.q, RADIUS assigned VLAN, VLAN per SSID, VLAN pooling. LLDP. IGMP Snooping (V1/v2/v3)	Troubleshooting Tools	Packet Capture, Spectrum Analyzer, DNS check, Ping, Traceroute, Syslog, Speedtest.
Mesh	WDS Mesh with Single and Multiple radio hops.	Traffic Tunnels	L2TP, L2oGRE, PPPoE
Network Services	NAT, DHCP Server		

cnMaestro Controller and Network Manager

Flexible Installation	Cloud, Virtual Machine both supported.	Integrated Guest Portal	Customizable Splash Pages SMS OTP Authentication Payment Gateways Support Voucher based authentication Social Login
Network Mgmt	Centralized Configuration, Statistics, Events, Firmware		
Hierarchical Views	Network topology mapped to sites and floors		
Floor Plans	Upload custom floor plans and map APs		
RESTful APIs	Interface with external systems		

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

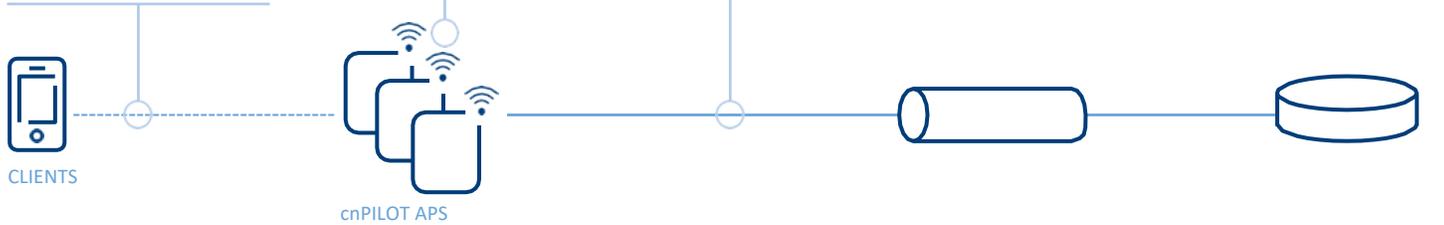
- Multi-hop mesh *autoPilot* controller
- Controller-less roaming
- autoRF dynamic Tx power control
- guest access
- Location APIs

USER TRAFFIC

- OPTIONS
- Local breakout (LBO)
- External GW tunneling – L2TP, L2oGRE, PPPoE
- 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 is available in models with and without PoE injectors.
 Regulatory model number (common to all skus) : cnPilot™ e410 indoor

PART NUMBERS

PL-E410PUSA-US	cnPilot E410 Indoor (FCC, US cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PEUA-EU	cnPilot E410 Indoor (EU, EU cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PXXA-RW	cnPilot E410 Indoor (ROW, No cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PEUA-RW	cnPilot E410 Indoor (ROW with EU cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PUKA-EU	cnPilot E410 (EU with UK country cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PUKA-RW	cnPilot E410 (ROW with UK country cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PUSA-RW	cnPilot E410 (ROW with US country cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PINA-RW	cnPilot E410 (ROW with India country cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PCNA-RW	cnPilot E410 (ROW with China country cord) 802.11ac Wave 2, 2x2, AP with PoE Injector
PL-E410PANA-RW	cnPilot E410 (ROW with AUS/NZ cord) 802.11ac Wave 2, 2x2, with PoE Injector
PL-E410PBRA-RW	cnPilot E410 (ROW with Brazil cord) 802.11ac Wave 2, 2x2, with PoE Injector
PL-E410PARA-RW	cnPilot E410 (ROW with Argentina cord) Wave 2, 2x2, 802.11ac with PoE Injector
PL-E410X00A-US	cnPilot E410 Indoor (FCC) 802.11ac wave 2, 2x2, AP
PL-E410X00A-EU	cnPilot E410 Indoor (EU) 802.11ac wave 2, 2x2, AP
PL-E410X00A-RW	cnPilot E410 Indoor (ROW) 802.11ac wave 2, 2x2, AP
PL-E410X00A-JP	cnPilot e410 Indoor (Japan) 802.11ac wave 2, 2x2, AP
PL-E410X00A-IL	cnPilot e410 Indoor (Israel) 802.11ac wave 2, 2x2, AP
PL-E410X00A-LK	cnPilot e410 Indoor (Sri Lanka) 802.11ac wave 2, 2x2, AP
PL-E410X00A-CA	cnPilot e410 Indoor (Canada) 802.11ac wave 2, 2x2, AP
PL-E410X00A-EG	cnPilot e410 Indoor (Egypt) 802.11ac wave 2, 2x2, AP
PL-E410PJPA-JP	cnPilot e410 Indoor (Japan, Japan Type A cord) 802.11ac wave 2, 2x2, AP with PoE Injector
PL-E410PILA-IL	cnPilot e410 Indoor (Israel, Israel Type H cord) 802.11ac wave 2, 2x2, AP with PoE Injector
PL-E410PINA-LK	cnPilot e410 Indoor (Sri Lanka, India Type D cord) 802.11ac wave 2, 2x2, AP with PoE Injector
PL-E410PUSA-CA	cnPilot e410 Indoor (Canada, US Type B cord) 802.11ac wave 2, 2x2, AP with PoE Injector
PL-E410PEUA-EG	cnPilot e410 Indoor (Egypt, Europe Type C cord) 802.11ac wave 2, 2x2, AP with PoE Injector
N000900L017A	PoE Gigabit Injector for cnPilot E410, 15W Output at 56V

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