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 supports 20MHz, 40MHz as well as 80MHz channels on 5GHz – 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

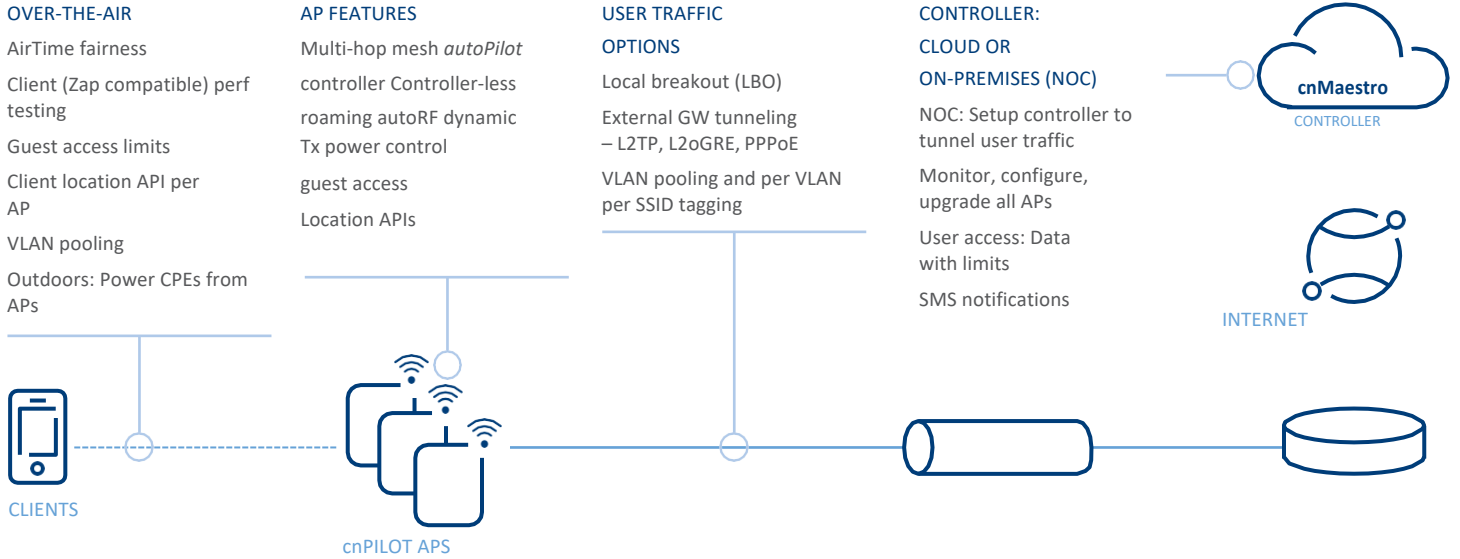|			
Standards	IEEE 802.11a/b/g/n/ac Wave2 IEEE 802.11d/e/h/i/k/r/u/v/w Modulation: BPSK, QPSK, CCK, 16/64/256-QAM Radio modes : DSSS, OFDM	**Frequency Bands** *(Country-specific limits apply, some bands require DFS. DFS bands operation subject to regulatory approval. Check SW release notes for details)*	2.400 to 2.2484 GHz 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 *(conducted total)*	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	**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 3rd 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
Network Mgmt	Centralized Configuration, Statistics, Events, Firmware		SMS OTP Authentication
Hierarchical Views	Network topology mapped to sites and floors		Payment Gateways Support
Floor Plans	Upload custom floor plans and map APs		Voucher based authentication
RESTful APIs	Interface with external systems		Social Login

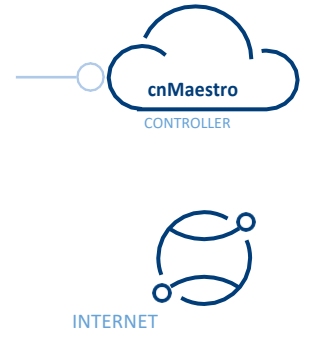## THE ADAPTIVE cnPILOT NETWORK

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

cnMaestro

CONTROLLER

INTERNET

CLIENTS

cnPILOT APS

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/