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 (5 years).
## SPECIFICATIONS

### Access Point Specifications

| Standards          | IEEE 802.11a/b/g/n/ac Wave2  
|                    | IEEE 802.11d/e/h/i/k/l/u/v/w  
|                    | Modulation: BPSK, QPSK, CCK, 16/64/256-QAM  
|                    | Radio modes: DSSS, OFDM  
| MIMO, Streams      | 2x2:2 MU-MIMO  
| Beamforming        | Supported  
| Channel Width      | 20MHz, 40MHz, 80MHz  
| Concurrent Clients | 256  
| SSIDs              | 16 SSIDs across 2 radios  
| Transmit Power     | 2.4GHz : 24dBm  
|                    | 5GHz : 25dBm  
| Antenna Gain       | 2.4GHz : 5.25dB  
|                    | 5GHz : 5.5dBi  
| Max Data Rate      | 2.4GHz : 400Mbdps  
|                    | 5GHz : 867Mbps  
| Antenna            | Dual linear-polarized, Omnidirectional, integrated  
| Ethernet Ports     | One auto-sensing Auto MDIX Gigabit Ethernet  
|                    | (10/100/1000 Mbps) RJ45 port  
| Radio Features     | Maximum ratio combining (MRC)  
|                    | Cyclic delay/shift diversity (CDD/CSO)  
|                    | Space-time blocking coding (STBC)  
|                    | Low-density parity check (LDP)  
|                    | Packet Aggregation: A-MPDU, A-MSDU  
| Wi-Fi Alliance     | Wi-Fi certified a/b/g/n/ac  
|                    | WPA2 – Enterprise, Personal  
|                    | WMM, Passpoint  
| Frequency Bands    | 2.400 to 2.484GHz  
|                    | (Country-specific limits apply, some bands require DFS. DFS bands operation subject to regulatory approval. Check SW release notes for details)  
| Power Supply       | 802.3af PoE Injector, or PoE switch powered  
| Dimensions         | 17.0 x 17.0 x 4.1 cm (6.7 x 6.7 x 1.61 inch)  
| Weight             | 384 g (0.86 lb)  
| Operating Temperature | 0°C to +50°C (+32°F to +122°F)  
| Operating Humidity | 10% to 95% non-condensing  
| Power Consumed     | 12.95W (max)  
| LED                | Tri-color software controlled LED  
| Secure Mounting    | Kensington Key Slot  
| MTBF               | 1,507,537 hrs at 50°C, 4,431,480 hrs at 25°C  
| Reset Button       | Supported  
| Certifications     | FCC, CE, IC, UL, EN60601-1-2 (Medical EMC), UL2043 Plenum  
|                    | WEEE/RoHS compliance  
| Mounting Options   | Wall and Ceiling mount bracket. Desktop option.  
|                    | T-Bar bracket supporting: 14mm, 24mm, 38mm.  
| 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)  
| RF Management      | cnMaestro automatically manages channel and power  
| 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 whitelists  
| Rate Limiting      | Per-client, Per-WLAN static and dynamic rate limiting  
| Client Isolation   | On AP, Network-wide.  
| Fast Roaming       | 802.11r, Opportunistic Key Caching, Enhanced Roaming  
| Airtime Management | Airtime Fairness, Band Steering, Band Balancing  
| AAA Support        | RADIUS Authentication, Accounting, Dynamic Authorization (CoA, DM). Server failover, load-balancing  
| QoS                | 802.11e/WMM GoS. DSCP/ToS mapping.  
| Ethernet (L2) Services | 802.1p/802.q, RADIUS assigned VLAN, VLAN per SSID, VLAN pooling. LLDP. IGMP Snooping (V1/V2/V3)  
| Mesh               | WDS Mesh with Single and Multiple radio hops.  
| Network Services   | NAT, DHCP Server  

### Wi-Fi Features

| Management Modes | cnMaestro cloud managed  
| Management Modes | cnMaestro on-premises VM controller managed  
| Management Modes | Autopilot (AP as controller for up to 32 AP network)  
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| Management Modes | WDS Mesh with Single and Multiple radio hops.  
| Management Modes | NAT, DHCP Server  
| Management Modes | WPA-TKIP, WPA-AES, WPA2-TKIP, WPA2-AES  
| Management Modes | WPA-PSK, WPA2-PSK, WPA2-E Enterprise, 802.11i  
| Management Modes | 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)  
| Management Modes | Protected Management Frames (802.11w)  
| Management Modes | by time/date, by monitored host.  
| Management Modes | On-AP MAC filter list.  
| Management Modes | On-Controller MAC filtering list.  
| Management Modes | RADIUS MAC Authentication.  
| Management Modes | MAC Authentication fallback to Captive Portal  
| Management Modes | Layer-2, Layer-3 and DNS ACL. DoS Protection.  
| Management Modes | Passpoint (Hotspot 2.0)  
| Management Modes | Supported, with Option-82 customization  
| Management Modes | SNMP v1, v2c, v3  
| Management Modes | Client Presence/Location API  
| Management Modes | DNS, NAT and TCP Connecting Logging  
| Management Modes | Auto (from controller), NTP  
| Management Modes | Packet Capture, Spectrum Analyzer, DNS check, Ping, Traceroute, Syslog, Speedtest.  
| Management Modes | L2TP, L2GRE, PPTP  
| Management Modes | 802.11a: 6,9,12,18,24,36,48,54  
| Management Modes | 802.11b/g: 1.2,5.5,6,9,11,12,18,24,36,48,54  
| Management Modes | 802.11n (2.4GHz): 6:5 to 400  
| Management Modes | 802.11ac (5GHz): 6:5 to 866.7  

### cnMaestro Controller and Network Manager

| Flexible Installation | Cloud, Virtual Machine both supported.  
| Flexible Installation | Network Mgmt  
| Flexible Installation | Hierarchical Views  
| Flexible Installation | Floor Plans  
| Flexible Installation | RESTful APIs  
| Flexible Installation | Interface with external systems  
| Flexible Installation | Customizable Splash Pages  
| Flexible Installation | SMS OTP Authentication  
| Flexible Installation | Payment Gateways Support  
| Flexible Installation | Voucher based authentication  
| Flexible Installation | Social Login  

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**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**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL-E41OPUSA-US</td>
<td>cnPilot E410 Indoor (FCC, US cord) 802.11ac Wave 2, 2x2, AP with PoE Injector</td>
</tr>
<tr>
<td>PL-E41OEU-AU</td>
<td>cnPilot E410 Indoor (EU, EU cord) 802.11ac Wave 2, 2x2, AP with PoE Injector</td>
</tr>
<tr>
<td>PL-E41OPXU-RW</td>
<td>cnPilot E410 Indoor (ROW, No cord) 802.11ac Wave 2, 2x2, AP with PoE Injector</td>
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<td>PL-E41OPXU-RW</td>
<td>cnPilot E410 Indoor (ROW with EU cord) 802.11ac Wave 2, 2x2, AP with PoE Injector</td>
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<tr>
<td>PL-E41OPUKA-EU</td>
<td>cnPilot E410 (EU with UK country cord) 802.11ac Wave 2, 2x2, AP with PoE Injector</td>
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<td>PL-E41OPUKA-RW</td>
<td>cnPilot E410 (ROW with UK country cord) 802.11ac Wave 2, 2x2, AP with PoE Injector</td>
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</tr>
<tr>
<td>PL-E41OPCN-RW</td>
<td>cnPilot E410 (ROW with China country cord) 802.11ac Wave 2, 2x2, AP with PoE Injector</td>
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<td>PL-E41OPBRA-RW</td>
<td>cnPilot E410 (ROW with Brazil cord) 802.11ac Wave 2, 2x2, with PoE Injector</td>
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<td>PL-E41OPARA-RW</td>
<td>cnPilot E410 (ROW with Argentina cord) Wave 2, 2x2, 802.11ac with PoE Injector</td>
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<td>PL-E410X00A-US</td>
<td>cnPilot E410 Indoor (FCC) 802.11ac wave 2, 2x2, AP</td>
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<td>PL-E410X00A-EU</td>
<td>cnPilot E410 Indoor (EU) 802.11ac wave 2, 2x2, AP</td>
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<td>cnPilot e410 Indoor (Japan) 802.11ac wave 2, 2x2, AP</td>
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<td>cnPilot e410 Indoor (Egypt) 802.11ac wave 2, 2x2, AP</td>
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<td>PL-E410PJP-JP</td>
<td>cnPilot e410 Indoor (Japan, Japan Type A cord) 802.11ac wave 2, 2x2, AP with PoE Injector</td>
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<tr>
<td>PL-E410PEUSN-EG</td>
<td>cnPilot e410 Indoor (Egypt, Europe Type C cord) 802.11ac wave 2, 2x2, AP with PoE Injector</td>
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</tbody>
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**N000900L017A**
- PoE Gigabit Injector for cnPilot E410, 15W Output at 56V

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