

# cnPilot™ e425, e430 Wall Plate Wi-Fi Access Points

802.11ac Wave 2 Wall Plate Access Point with Multi-Function Ethernet Ports

## QUICK LOOK:

Cambium Networks wall plate access points (AP) put personal Wi-Fi in the room where people and devices connect. Designed for discreet installation on a flat wall surface or over a wiring box. Both of these high-powered wall plate AP's include enterprise-grade seamless roaming, automated RF control, beamforming and the latest 802.11ac Wave 2 technology.

| e425   | e430  |
|--|---|
| 802.11a/b/g/n/ac Wave 2                                |   |
| 5 GHz (2x2), 2.4 GHz (2x2)                             |   |
| e425: passive PoE out; e430: 802.3af compliant PoE out |   |
| 25 dBm EIRP (5 GHz);<br>27 dBm EIRP (2.4 GHz)          | 25dBm EIRP (5 GHz);<br>26dBm EIRP (2.4 GHz) |
| Three-Gigabit Ethernet                                 | Four-Gigabit Ethernet                       |



### CLOUD-MANAGED ACCESS

All cnPilot access points are managed by cnMaestro from the cloud, an on-premises VM or a private datacenter. cnMaestro provides single-pane-of-glass dashboard for Wi-Fi, Ethernet, fixed wireless broadband and service provider home routers.

- Zero-touch onboarding
- Inventory reports, mass configuration and upgrade
- Dashboard views with alarms and key performance metrics
- Remote troubleshooting tools
- Hierarchical device organization
- Cloud managed guest portal with social login, vouchers, rate, time and throughput limits

cnMaestro Essential cloud management is included at no additional cost. There are no setup fees, licenses or recurring costs. cnMaestro includes detailed network statistics, channel utilization graphs, and integrated remote troubleshooting tools to ensure service is always on. Wall plate AP's are ideal for hotels, dormitory housing, MDU, and micro-cell Wi-Fi where fast installation and discreet aesthetics are desired.

### DO-NOT-DISTURB HOTEL DESIGN

Hotel guests connect to Wi-Fi before turning on the TV. Wi-Fi is a must-have to stay connected with coworkers, family and social media. With the e425 and e430 wall plate AP, the guest will be delighted with a perfect connection to all their devices. Customize the cloud-managed guest access with a fully configurable cloud portal with templates, point and click interface, or HTML CSS.

### DESIGNED FOR FAST INSTALLATION

e425 and e430 install quickly over a standard wiring box, or to other boxes and surfaces using the optional mounting adapters. e425 has three gigabit Ethernet ports, while the e430 has four gigabit Ethernet ports. All ports support 802.1Q VLANs, IGMP, switched virtual interface layer 3 routing, DHCP, and firewall. Deliver 15 watts of operating power to an external device such as a VoIP phone, an in-room IoT hub or even another AP. VLAN and IP segmentation allows secure connections to a TV set-top box, laptop, printer, or any networked device.

## cnPilot™ e425, e430 Indoor Wi-Fi Access Points

### Access Point Specifications

|                                      | e425  | e430  |
|--------------------------------------|---|---|
| <b>US-FCC</b>                        | Ch 1-11, 36-64, 100-144, 149-165  | Ch 1-11, 36-64, 100-144, 149-165  |
| <b>ISED Canada</b>                   | Ch 1-11, 36-64, 100-116, 149-165  | Ch 1-11, 36-64, 100-116, 149-165  |
| <b>EU-ETSI</b>                       | Ch 1-13, 36-64, 100-140   | Ch 1-13, 36-64, 100-140   |
| <b>ROW</b>                           | Ch 1-13, 36-64, 100-144, 149-173<br><i>Individual country limits apply</i>  | Ch 1-13, 36-64, 100-144, 149-173<br><i>Individual country limits apply</i>  |
| <b>Radios</b>                        | 1 x 5 GHz radio (802.11a/n/ac Wave 2), 2x2<br>1 x 2.4 GHz (802.11b/g/n), 2x2<br>SU-MIMO / MU-MIMO: 2 streams      | 1 x 5 GHz radio (802.11a/n/ac Wave 2), 2x2<br>1 x 2.4 GHz (802.11b/g/n), 2x2<br>SU-MIMO / MU-MIMO: 2 streams<br>Integrated Bluetooth Smart radio            |
| <b>Wi-Fi</b>                         | 802.11 a/b/g/n/ac Wave 2  | 802.11 a/b/g/n/ac Wave 2  |
| <b>SSID Security</b>                 | WPA2 (802.11i), WPA2 Enterprise (802.1x/EAP), WPA PSK, Open   |   |
| <b>Max PHY Rate</b>                  | <b>2.4 GHz radio:</b> 300 Mbps  | <b>5 GHz radio:</b> 867 Mbps  |
| <b>Ethernet</b>                      | Three IEEE Gigabit Ethernet auto sensing  | Four IEEE Gigabit Ethernet auto sensing   |
| <b>USB port</b>                      | Yes   | -   |
| <b>Antenna</b>                       | Internal omni-directional<br><b>2.4 GHz:</b> 3.84 dBi <b>5 GHz:</b> 4.08 dBi                                      | Internal omni-directional<br><b>2.4 GHz:</b> 3.57 dBi <b>5 GHz:</b> 4.96 dBi  |
| <b>Max EIRP</b>                      | <b>2.4 GHz:</b> 27 dBm <b>5 GHz:</b> 25 dBm<br>(EIRP limited by country regulations)                              | <b>2.4 GHz:</b> 26 dBm <b>5 GHz:</b> 25 dBm<br>(EIRP limited by country regulations)  |
| <b>WLAN</b>                          | 100 clients, 32 SSIDs (16 per radio)<br>WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF                                   | 256 clients, 32 SSIDs (16 per radio)<br>WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF   |
| <b>Power</b>                         | 802.3af or 802.3at powered device<br>Typical load, no power out: 8 W<br>Typical load, with 15.4 W power out: 24 W | Typical load, no power out: 9 W<br>Typical load, with 15.4 W power out: 25 W<br>Power out: 15.4 W when input is 802.3at<br>2.1 mm DC barrel connector, 48 V |
| <b>MTBF</b>                          | 511k hours at 25C; 121.79k hours 45C  | 261k hours at 25C, 121.79k hours 45C  |
| <b>Dimensions</b>                    | 147 mm x 94 mm x 32 mm<br>(5.79 in x 3.7 in x 1.26 in)  | 147 mm x 94 mm x 32 mm<br>(5.79 in x 3.7 in x 1.26 in)  |
| <b>Weight</b>                        | 268 g (0.59 lb)   | 390 g (0.86 lb)   |
| <b>Security</b>                      | Kensington lock slot, secure bracket  | Kensington lock slot, secure bracket  |
| <b>LEDs</b>                          | Tri-color status LEDs   | Tri-color status LEDs   |
| <b>Ambient Operation Temperature</b> | 0°C to 40°C (32°F to 104°F)   | 0°C to 40°C (32°F to 104°F)   |
| <b>Storage Temperature</b>           | -40°C to 70°C (-40°C to 158°F)  | -40°C to 70°C (-40°C to 158°F)  |
| <b>Humidity</b>                      | 95% RH non-condensing   | 95% RH non-condensing   |
| <b>Certifications (compliance)</b>   | 802.11u, HotSpot 2.0, 802.11 a/b/g/n/ac, PP2.0 FCC, IC, ETSI, CE, EN 60601-1-2, IEC60950                          |   |

## cnPilot™ e425, e430 Indoor Wi-Fi Access Points

### Network Specifications

**Authentication Encryption** 802.1x EAP-SIM/AKA/AKA'/FAST, EAP-PEAP, EAP-TTLS, EAP-TLS/MSCHAPv2, PEAPv0/PEAPv1  
MAC authentication to local database (on AP, on Controller) or external RADIUS. MAC auth fallback to guest portal

**Scheduled WLAN** On/off by day, week, time of day

**APIs** RESTful management and statistics API  
Presence location API  
Splunk WebSocket integration, WebSocket  
DNS, NAT, TCP connection log

**QoS** 802.11e/WMM QoS. DSCP/ToS mapping

**VLAN** 802.11Q, max 4096

**Fast Roaming** 802.11r, OKC, cnMaestro assisted roam

**Sticky Client** Enhanced roaming with thresholds

**Mesh** Multi-hop (2), either band

**Channel Selection** Auto RF: Manual, or automatic

**Network** NAT, NAT logging firewall, DOS protection, L2/L3/DNS ACL, DHCP server, DHCP Relay option 82  
LLDP, IGMP v1, v2  
VLAN Pooling, RADIUS attribute VID  
VLAN per SSID, per user  
Integrated WIDS (wireless intrusion detection)

**Band Steer Load Balance** Yes

**Tunnel** L2TPv2, L2GRE, PPPoE

**Network and RF Management Tools** Out-of-band RF spectrum analysis, RF monitor with channel/noise/interference, wired and wireless remote packet capture, ZapD performance tool, rogue AP detection

### Management

**Interfaces** HTTP / HTTPS web interface, SSH, Telnet  
SNMP V1, V2, V3  
Syslog, SNMP traps, NTP

**Deployment** cnMaestro Cloud, cnMaestro on-premises, Standalone AP

**Services** Monetized guest portal with design tools

**Captive Portal** **Portal features hosted on cnMaestro:**  
Design templates, customization tools  
supports 3rd party external portal  
RADIUS/LDAP/Click Through authentication  
Active Directory, Google, Facebook, Office 365, OAuth 2.0  
Data Rate/Throughput limits, Time duration

**Portal features hosted on the AP:**  
supports 3rd party external portal  
RADIUS/LDAP/Click Through authentication  
Data Rate/Throughput limits, Time duration

**Hotspot 2.0** 802.11u, HotSpot 2.0

**Accounting** RADIUS accounting, load balancing AAA servers, Dynamic Authorization COA, DM

**Service Availability** Critical network resource monitor with SSID shutdown

## cnPilot™ e425, e430 Indoor Wi-Fi Access Points

### e430H Solution Architecture View

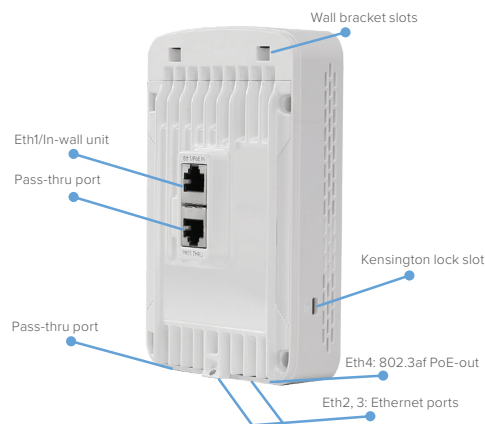


### e430H Radio Unit and Accessories

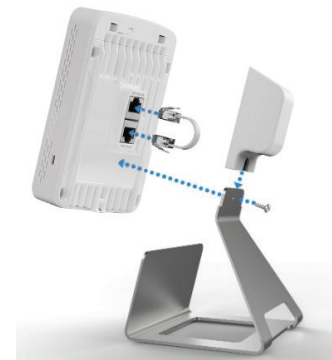
Dual band  
2x2 802.11ac  
Wave 2  
MU-MIMO +  
Integrated  
BLE



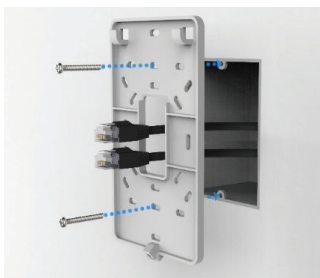
e430H Radio Front Facing



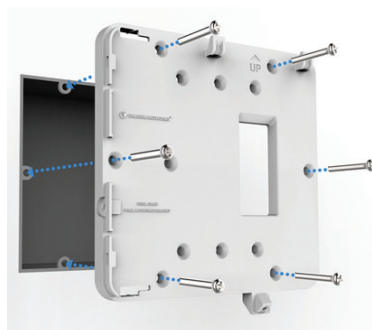
e430H Radio Rear Facing



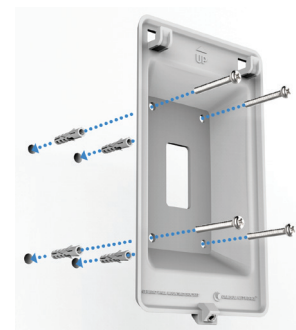
Optional Accessory: Desktop Stand



Optional Accessory:  
Single-Gang Bracket



Optional Accessory:  
Dual-Gang Bracket



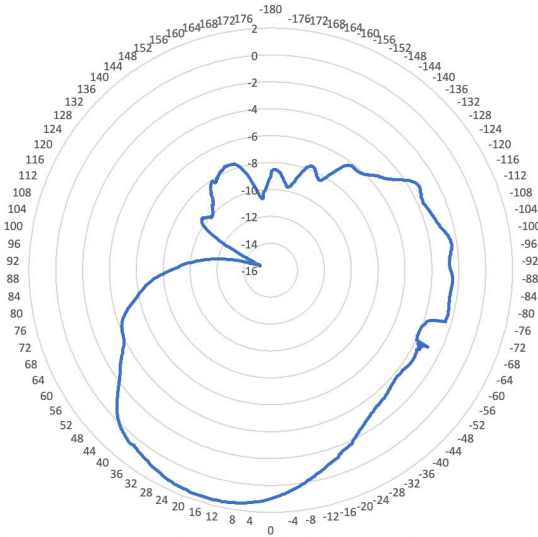
Optional Accessory:  
Generic Wall Bracket

The e430H is designed to be powered by an external PoE injector. Alternatively, it may be powered by an external 48V/1A DC adapter (sold separately). Other optional accessories are available for separate purchase.

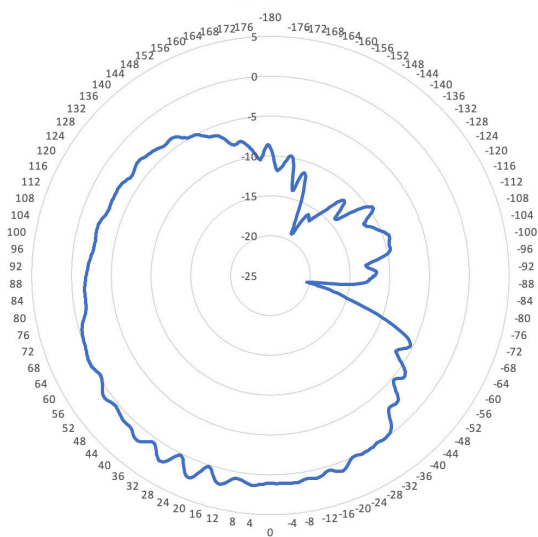
# cnPilot™ e425, e430 Indoor Wi-Fi Access Points

## e425 Antenna Patterns

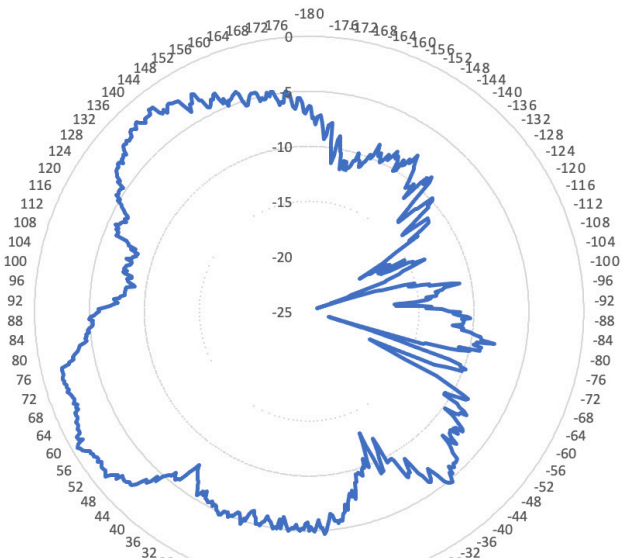
2.4 GHz Elevation



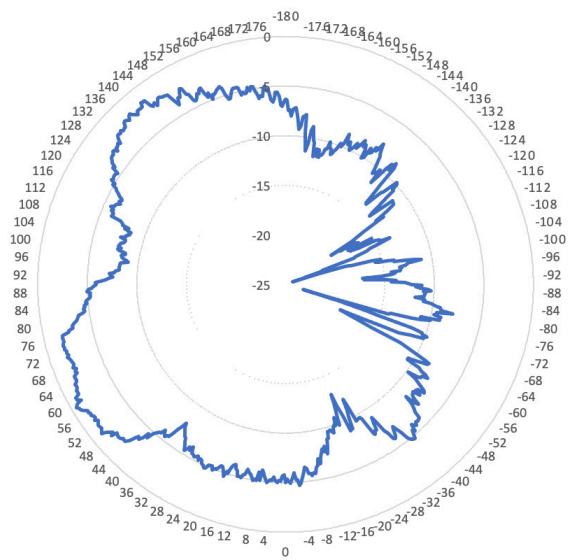
2.4 GHz Azimuth



5 GHz Elevation



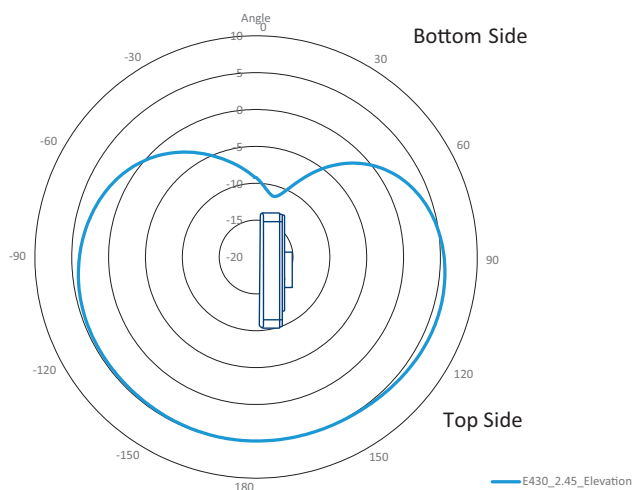
5 GHz Azimuth



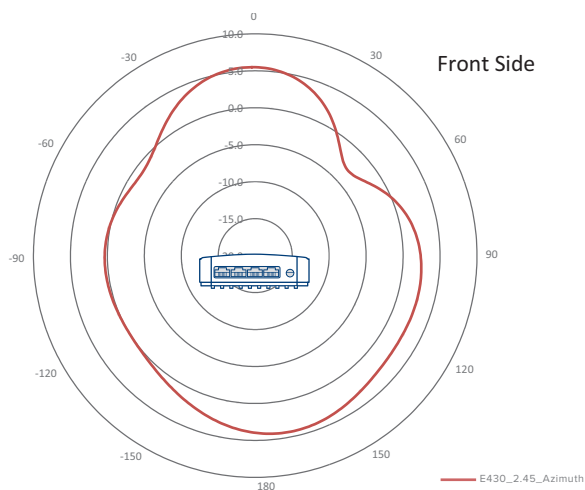
## cnPilot™ e425, e430 Indoor Wi-Fi Access Points

### e430 Antenna Patterns

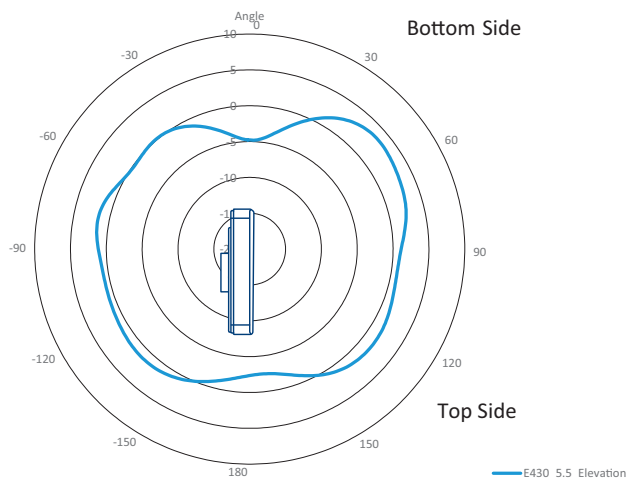
2.4 GHz Elevation



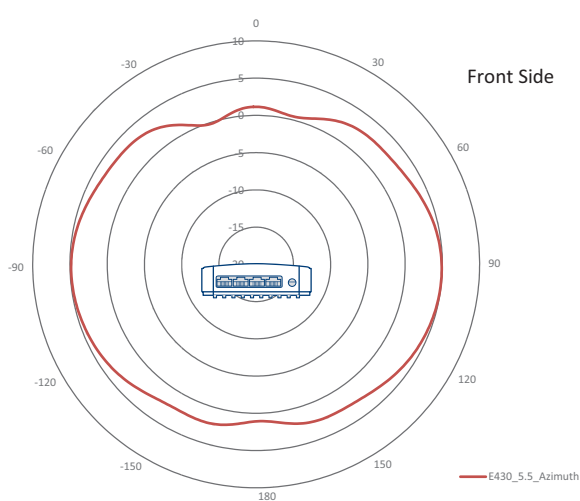
2.4 GHz Azimuth



5 GHz Elevation



5 GHz Azimuth



### Standards

#### Wi-Fi Protocols

VHT MCS rates, 16/64/256-QAM, HT20/40/80 MHz

Transmit beamsteering, Airtime Fairness, AMSDU, AMPDU, RIFS, STBC, LDPC

MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM. IEEE 802.11d/e/h/i/k/r/u/v

## cnPilot™ e425, e430 Indoor Wi-Fi Access Points

### Ordering Information

|                       |   |
|-----------------------|---|
| <b>PL-E425H00A-US</b> | e425H Indoor (FCC) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket        |
| <b>PL-E425H00A-EU</b> | e425H Indoor (EU) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket         |
| <b>PL-E425H00A-RW</b> | e425H Indoor (ROW) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket        |
| <b>PL-E425H00A-IL</b> | e425H Indoor (Israel) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket     |
| <b>PL-E425H00A-CA</b> | e425H Indoor (Canada) 802.11ac Wave 2, 2x2, Wall plate AP with single-gang wall bracket   |
| <b>PL-E425H00A-US</b> | e425H Indoor (FCC) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket        |
| <b>PL-E430H00A-US</b> | e430H Indoor (FCC) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket |
| <b>PL-E430H00A-EU</b> | e430H Indoor (EU) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket  |
| <b>PL-E430H00A-RW</b> | e430H Indoor (ROW) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket |
| <b>PL-E430H00A-EG</b> | e430H Indoor (EG) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket  |
| <b>PL-DUWLGNGB-WW</b> | e430H Wall bracket single gang junction box   |
| <b>PL-SNWLGNGB-WW</b> | e430H Wall bracket single gang junction box   |
| <b>PL-WALLMNTB-WW</b> | e430H Wall bracket generic wall mounting of AP  |
| <b>AX-ETHJMPRA-WW</b> | Flat Cat6 Ethernet Cable, 50mm  |
| <b>PL-DTSTANDB-WW</b> | e430H Desktop Stand   |

### LIMITED WARRANTY

Cambium Networks cnPilot e425 and e430H are covered by a limited lifetime hardware warranty for a period of 5 years after point of sale.

### ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.