Cambium Networks<sup>™</sup>

# cnPilot<sup>™</sup> 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	2.4 GHz (2x2)
e425: passive PoE out; e430	): 802.3af compliant PoE out
25 dBm EIRP (5 GHz); 27 dBm EIRP (2.4 GHz)	25dBm EIRP (5 GHz); 26dBm EIRP (2.4 GHz)
Three-Gigabit Ethernet	Four-Gigabit Ethernet
	cn <b>Maestro</b>

#### 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-paneof- 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<sup>™</sup> e425, e430 Indoor Wi-Fi Access Points

## **Access Point Specifications**

	425	- 120	
US-FCC ISED Canada EU-ETSI ROW	e425 Ch 1-11, 36-64, 100-144, 149-165 Ch 1-11, 36-64, 100-116, 149-165 Ch 1-13, 36-64, 100-140 Ch 1-13, 36-64, 100-144, 149-173 Individual country limits apply	e430 Ch 1-11, 36-64, 100-144, 149-165 Ch 1-11, 36-64, 100-116, 149-165 Ch 1-13, 36-64, 100-140 Ch 1-13, 36-64, 100-144, 149-173 Individual country limits apply	
Radios	1 x 5 GHz radio (802.11a/n/ac Wave 2), 2x2 1 x 2.4 GHz (802.11b/g/n), 2x2 SU-MIMO / MU-MIMO: 2 streams	1 x 5 GHz radio (802.11a/n/ac Wave 2), 2x2 1 x 2.4 GHz (802.11b/g/n), 2x2 SU-MIMO / MU-MIMO: 2 streams Integrated Bluetooth Smart radio	
Wi-Fi	802.11 a/b/g/n/ac Wave 2	802.11 a/b/g/n/ac Wave 2	
SSID Security	WPA2 (802.11i), WPA2 Enterprise (802.1x/EAP), WPA PSK, Open		
Max PHY Rate	2.4 GHz radio: 300 Mbps	5 GHz radio: 867 Mbps	
Ethernet	Three IEEE Gigabit Ethernet auto sensing	Four IEEE Gigabit Ethernet auto sensing	
USB port	Yes	-	
Antenna	Internal omni-directional <b>2.4 GHz:</b> 3.84 dBi <b>5 GHz:</b> 4.08 dBi	Internal omni-directional <b>2.4 GHz:</b> 3.57 dBi <b>5 GHz:</b> 4.96 dBi	
Max EIRP	<b>2.4 GHz:</b> 27 dBm <b>5 GHz:</b> 25 dBm (EIRP limited by country regulations)	<b>2.4 GHz:</b> 26 dBm <b>5 GHz:</b> 25 dBm (EIRP limited by country regulations)	
WLAN	100 clients,32 SSIDs (16 per radio) WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF	256 clients, 32 SSIDs (16 per radio) WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF	
Power	802.3af or 802.3at powered device Typical load, no power out: 8W Typical load, with 15.4W power out: 24W	Typical load, no power out: 9W Typical load, with 15.4W power out: 25W Power out: 15.4W when input is 802.3at 2.1 mm DC barrel connector, 48V	
MTBF	511k hours at 25°C; 121.79k hours 45°C	261k hours at 25°C, 121.79k hours 45°C	
Dimensions	147 mm x 94 mm x 32 mm (5.79 in x 3.7 in x 1.26 in)	147 mm x 94 mm x 32 mm (5.79 in x 3.7 in x 1.26 in)	
Weight	268 g (0.59 lb)	390 g (0.86 lb)	
Security	Kensington lock slot, secure bracket	Kensington lock slot, secure bracket	
LEDs	Tri-color status LEDs	Tri-color status LEDs	
Ambient Operation Temperature	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)	
Storage Temperature	-40°C to 70°C (-40°C to 158°F)	-40°C to 70°C (-40°C to 158°F)	
Humidity	95% RH non-condensing	95% RH non-condensing	
Certifications (compliance)	802.11u, HotSpot 2.0, 802.11 a/b/g/n/ac, P	P2.0 FCC, IC, ETSI, CE, EN 60601-1-2, IEC60950	

## **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	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
Scheduled WLAN	On/off by day, week, time of day		detection)
APIs	RESTful management and statistics API Presence location API Splunk WebSocket integration, WebSocket DNS, NAT, TCP connection log	Band Steer Load Balance	Yes
		Tunnel	L2TPv2, L2GRE, PPPoE
QoS	802.11e/WMM QoS. DSCP/ToS mapping	Network and	Out-of-band RF spectrum analysis, RF
VLAN	802.11Q, max 4096	RF Management Tools	monitor with channel/noise/interference, wired and wireless remote packet capture,
Fast Roaming	802.11r, OKC, cnMaestro assisted roam		ZapD performance tool, rogue AP detection
Sticky Client	Enhanced roaming with thresholds		
Mesh	Multi-hop (2), either band		
Channel Selection	Auto RF: Manual, or automatic		

## Management

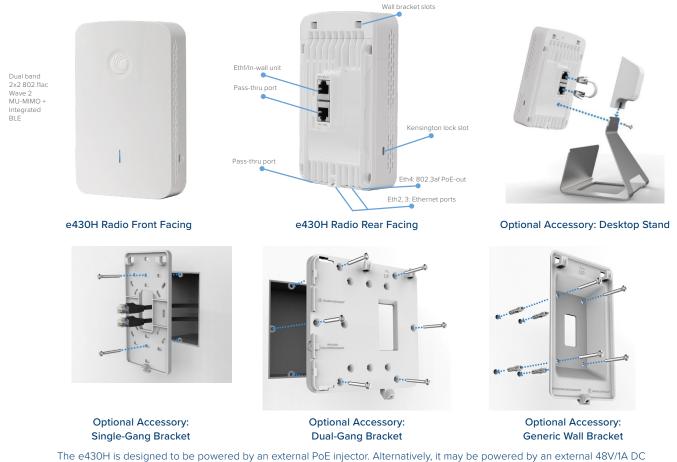
Interfaces	HTTP / HTTPS web interface, SSH, Telnet SNMP V1, V2, V3 Syslog, SNMP traps, NTP	Captive Portal	Portal features hosted on cnMaestro: Design templates, customization tools supports 3rd party external portal RADIUS/LDAP/Click Through authentication Active Directory, Google, Facebook, Office 365, OAuth 2.0
Deployment	cnMaestro Cloud, cnMaestro on-premises, Standalone AP		
Services	Monetized guest portal with design tools		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 Availabilty	Critical network resource monitor with SSID shutdown



#### e430H Solution Architecture View



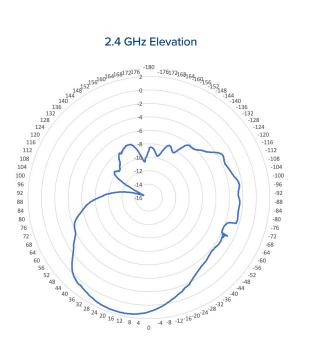
### e430H Radio Unit and Accessories



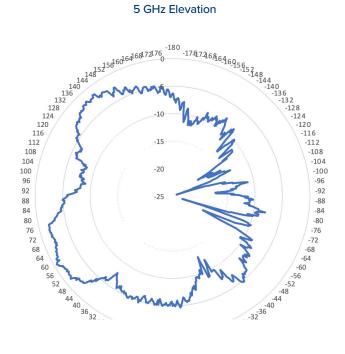
The e430H is designed to be powered by an external PoE injector. Alternatively, it may be powered by an external 48V/1A DC adapter (sold separately). Other optional accessories are available for separate purchase.

#### e425 Antenna Patterns

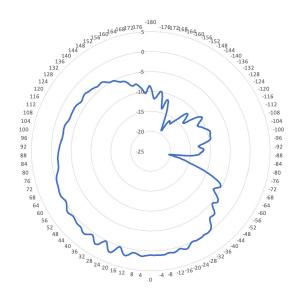
2.4 GHz Elevation



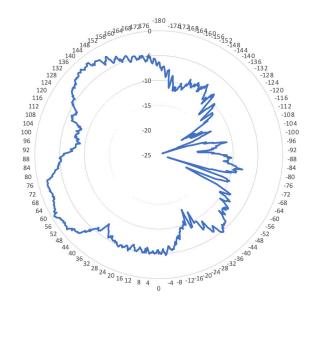
**5 GHz Elevation** 



2.4 GHz Azimuth

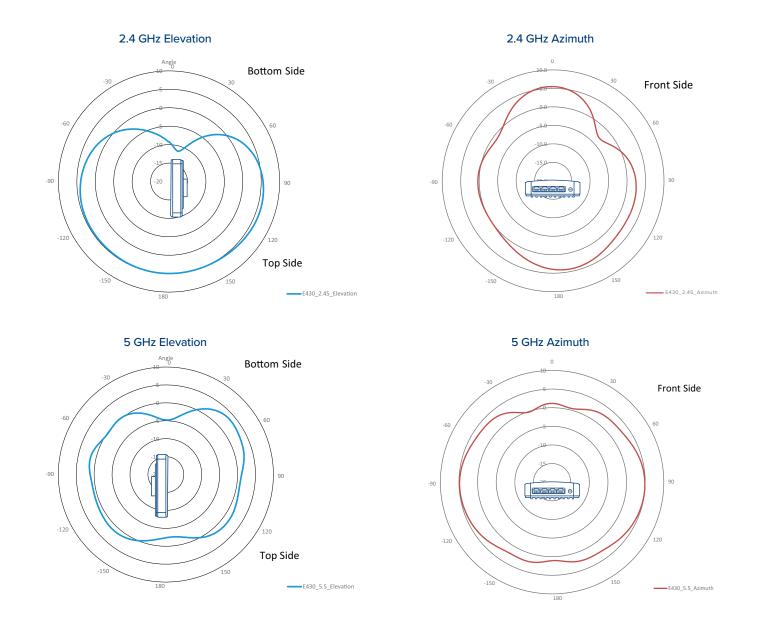


5 GHz Azimuth



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## e430 Antenna Patterns



Standards	
Wi-Fi	VHT MCS rates, 16/64/256-QAM, HT20/40/80 MHz
Protocols	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

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

#### cambiumnetworks.com