

# 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), 2.4 GHz (2x2)

e425: passive PoE out; e430: 802.3af compliant PoE out

25 dBm EIRP (5 GHz); 25dBm EIRP (5 GHz); 27 dBm EIRP (2.4 GHz) 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-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.

©2022 Cambium Networks. Inc. cambiumnetworks.com



### **Access Point Specifications**

	e425	e430
US-FCC ISED Canada EU-ETSI ROW	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	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 (80	2.1x/EAP), WPA PSK, Open
Max PHY Rate	<b>2.4 GHz radio</b> : 300 Mbps <b>5 0</b>	GHz radio: 867 Mbps
Ethernet	Three IEEE Gigabit Ethernet auto sensing	Four IEEE Gigabit Ethernet auto sensing
USB port	Yes	-
Antenna	Internal omni-directional  2.4 GHz: 3.84 dBi  5 GHz: 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, PP2.0	) FCC, IC, ETSI, CE, EN 60601-1-2, IEC60950



#### **Network Specifications**

Authentication802.1x EAP-SIM/AKA/AKA'/FAST, EAP-PEAP,EncryptionEAP-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

Critical network resource monitor with SSID

**Availabilty** shutdown

©2022 Cambium Networks, Inc. 3 cambiumnetworks.com

**Service** 

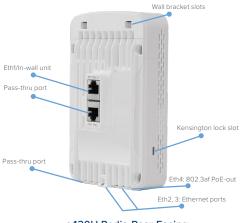


#### e430H Solution Architecture View



#### e430H Radio Unit and Accessories







e430H Radio Front Facing

e430H Radio Rear Facing

Optional Accessory: Desktop Stand







Optional Accessory: **Dual-Gang Bracket** 



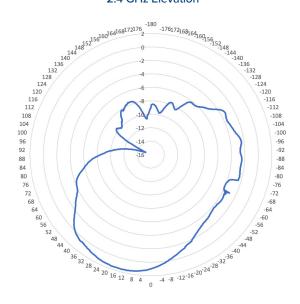
Optional Accessory: Generic Wall Bracket

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.

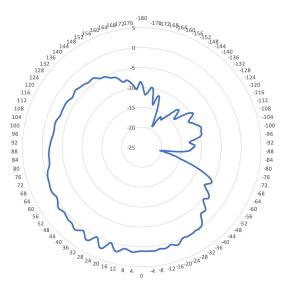


#### e425 Antenna Patterns

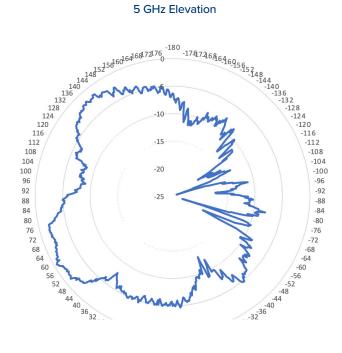
#### 2.4 GHz Elevation



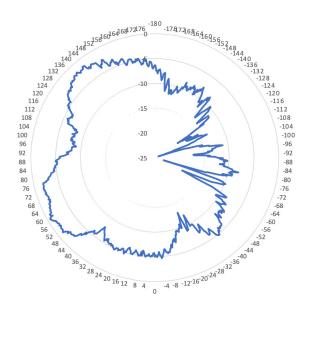
2.4 GHz Azimuth



#### 5 GHz Elevation

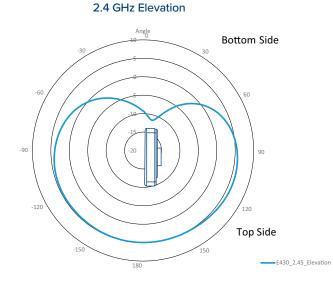


#### 5 GHz Azimuth

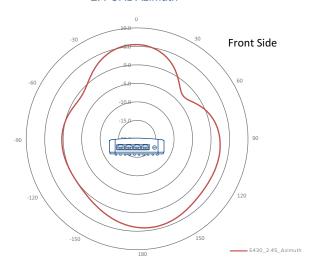




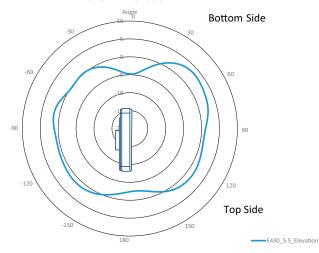
#### e430 Antenna Patterns



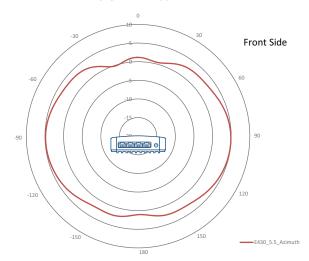
#### 2.4 GHz Azimuth



#### 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



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	

cnMaestro X Ordering Information		
MSX-SUB-T3-1	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 1-year term	
MSX-SUB-T3-3	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 3-year term	
MSX-SUB-T3-5	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 5-year term	
MSX-SUB-T3-M	cnMaestro X for Enterprise: Advanced management and includes Cambium Care Pro Support; 1-month term	

©2022 Cambium Networks, Inc. 7 cambiumnetworks.com



Cambium Care Ordering Information		
CCADV-SUP-XV3-8-1	Cambium Care Advanced, 1-year support for one cnPilot cnPilot e425 or e430 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW	
CCADV-SUP-XV3-8-3	Cambium Care Advanced, 3-year support for one cnPilot cnPilot e425 or e430 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW	
CCADV-SUP-XV3-8-5	Cambium Care Advanced, 5-year support for one cnPilot cnPilot e425 or e430 AP. 24x7 TAC support, SW updates, and NBD advance replacement for HW	
CCPRO-SUP-XV3-8-1	Cambium Care Pro, 1-year support for one cnPilot cnPilot e425 or e430 AP. 24x7 TAC support and SW updates	
CCPRO-SUP-XV3-8-3	Cambium Care Pro, 3-year support for one cnPilot cnPilot e425 or e430 AP. 24x7 TAC support and SW updates	
CCPRO-SUP-XV3-8-5	Cambium Care Pro, 5-year support for one cnPilot cnPilot e425 or e430 AP. 24x7 TAC support and SW updates	

#### **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