

# cnPilot<sup>™</sup> e425, e430 wall Plate Wi-Fi Access Points

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

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.

#### QUICK LOOK:

e425

e430

802.11a/b/g/n/ac Wave 2

5 GHz (2x2), 2.4 GHz (2x2)

15 watts power out on one-gigabit port

25 dBm EIRP (5 GHz)

26 dBm EIRP (5 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.

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### **Access Point Specifications**

	e425	e430
US-FCC ISED Canada EU-ETSI ROW	Ch 1-11, 36-48, 149-157 Ch 1-11, 36-48, 149-157 Ch 1-13, 32-48, 159-165 Ch 1-13, 32-48, 159-165	Ch 1-11, 36-48, 149-157 Ch 1-11, 36-48, 149-157 Ch 1-13, 32-48, 159-165 Ch 1-13, 32-48, 159-165
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	<b>2.4 GHz radio</b> : 300 Mbps	<b>5 GHz radio:</b> 867 Mbps
Ethernet	Three IEEE Gigabit Ethernet auto sensing	Four IEEE Gigabit Ethernet auto sensing
Antenna	Internal omni-directional  2.4 GHz: 4 dBi  5 GHz: 4 dBi	Internal omni-directional  2.4 GHz: 3.57 dBi  5 GHz: 5 dBi
Max EIRP	<b>2.4 GHz:</b> 25 dBm <b>5 GHz:</b> 27 dBm (EIRP limited by country regulations)	<b>2.4 GHz:</b> 26 dBm <b>5 GHz:</b> 26 dBm (EIRP limited by country regulations)
WLAN	100 clients, 16 SSIDs WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF	256 clients, 16 SSIDs WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF
Power	802.3af or 802.3at powered device Typical load, no power out: 8 W Typical load, with 15.4 W power out: 25 W Power out: 15.4 W when input is 802.3at	Typical load, no power out: 9 W Typical load, with 15.4 W power out: 25 W Power out: 15.4 W when input is 802.3at 2.1 mm DC barrel connector, 48 V
MTBF	249k @ 40c	249k @ 45c
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)	Wi-Fi Alliance 80211 a/b/g/n/ac, PP2.	0 FCC, ETSI, CE, EN 60601-1-2, IEC60950



#### **Network Specifications**

Authentication	802.1x EAP-SIM/AKA/AKA'/FAST, EAP-PEAP,
Encryption	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

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

**VLAN** 802.11Q, max 4096

Fast Roaming 802.11r, OKC, Enhanced roaming

Mesh Multi-hop (3), either band

Channel
Auto RF: Manual, or automatic

**Auto TX Power** Auto RF: automatically adjust max

transmit power

**Network** NAT, NAT logging firewall, DOS protection,

L2/L3/DNS ACL, DHCP server, DHCP Relay

option 82

LLDP, IGMP v1, v2, v3

VLAN Pooling, RADIUS attribute VID

VLAN per SSID, per user

Integrated WIDS (wireless intrusion

detection)

Band Steer Load Balance

Yes

**Tunnel** L2TP, L2oGRE, PPPoE

Network and RF Management Tools Out-of-band RF spectrum analysis, radio self test network assurance, RF monitor with chn/noise/interference, wired and wireless remote packet capture, auto logging, ZapD performance tool, rogue AP detection, ultralow power mode, honeypot control

#### Management

**Interfaces** HTTP / HTTPS web interface, SSL, Telnet

SNMP V1, V2, V3

Syslog, SNMP traps, NTP

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

Standalone AP

**Services** Monetized, cloud-managed guest portal with

design tools

APIs RESTful management and statistics API

Presence location API

Splunk WebSocket integration, WebSocket

DNS, NAT, TCP connection log

**Captive Portal** Hosted on cnMaestro Controller On-AP hosted guest portal

Redirect to HTTP/RADIUS external portal/

authentication

Active Directory integration, Google, Facebook, Office 365 integration

Data rate, time duration, data throughput limit,

Server DNS logging

Hotspot 2.0 Hotspot 2.0/Passpoint 2.0

**Accounting** RADIUS accounting, load balancing AAA

servers, Dynamic Authorization COA, DM

Service Availabilty Critical network resource monitor with automatic shutdown maintains device

connectivity



#### e430H Solution Architecture View



#### e430H Radio Unit and Accessories







**Optional Accessory:** Single-Gang Bracket



**Optional Accessory: Dual-Gang Bracket** 

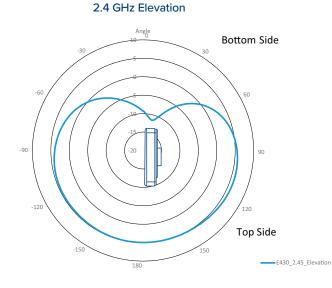


**Optional Accessory:** Generic Wall Bracket

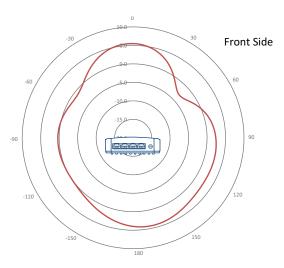
The e430H is designed to be powered by an external PoE injector. Alternatively, it may be powered by an external 48V/1A DC adapter (sold separately). Other optional accessories are available for separate purchase.



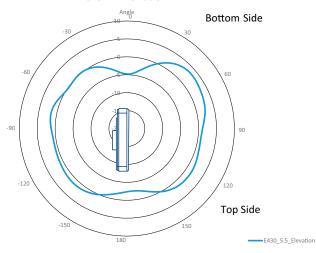
#### **Antenna Patterns**



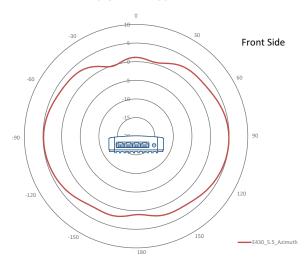
#### 2.4 GHz Azimuth



#### 5 GHz Elevation



#### 5 GHz Azimuth



#### **Standards**

#### Wi-Fi Protocols

MU-OFDMA, MU-MIMO, TWT, MIMO

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	cnPilot e425H Indoor (FCC) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket	
PL-e425H00A-EU	cnPilot e425H Indoor (EU) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket	
PL-e425H00A-RW	cnPilot e425H Indoor (ROW) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket	
PL-e425H00A-IL	cnPilot e425H Indoor (Israel) 802.11ac Wave 2, Wall plate WLAN AP w/ single-gang wall bracket	
PL-e425H00A-CA	cnPilot e425H Indoor (Canada) 802.11ac Wave 2, 2x2, Wall plate AP with single-gang wall bracket	
PL-e425H00A-US	cnPilot 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-e430W00A-US	e430W Indoor (FCC) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket	
PL-e430W00A-EU	e430W Indoor (EU) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket	
PL-e430W00A-RW	e430W Indoor (ROW) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket	
PL-e430W00A-SL	e430W Indoor (Sri Lanka) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket	
PL-e430W00A-IL	e430W Indoor (Israel) 802.11ac Wave 2, 2x2, Wall plate WLAN AP with single-gang wall bracket	
PL-DUWLGNGC-WW	e425H/e430H Accessory Wall bracket for dual-gang junction box	
PL-SNWLGNGC-WW	e425H/e430H Accessory Wall bracket for single-gang junction box	
PL-WALLMNTC-WW	e425H/430H Accessory Wall bracket for generic wall mounting of AP	
AX-ETHJMPRA-WW	Accessory short Ethernet jumper cable for use on generic wall mounting (PL-WALLMNTA-WW)	

#### 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.

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