**RISING CONNECTION**

Cambium Networks™

# cnPilot™ Indoor E410

## 802.11ac wave 2 dual band 2x2 Indoor access point

The compact low profile 802.11ac Wave 2 Multiuser MIMO (MU-MIMO) beamforming, high speed E410 Enterprise access point future proofs your Indoor access point deployments and is perfect for Schools, Indoor public spaces, Malls, Hotels and Resorts (Hospitality), Coffee shops, Multi-dwelling units (MDUs) or just about any place indoor that needs reliable high performing access points.

### CONTROLLER MANAGED + AUTONOMOUS
Managed by Cambium's cnMaestro™ cloud controller or On-premises controller, the cnPilot E410 management includes:
• Zero touch onboarding
• Inventory tracking
• Monitoring
• Mass Configuration
• Dashboard views with Alarms
• Mass upgrade
• Troubleshooting
• Hierarchical device organisation

### CONTROLLER-LESS ROAMING. POWERFUL SIMPLICITY
The E410 supports seamless roaming for up to 1,000 clients without needing a controller in the network! Hotspot portal hosting on the AP itself offers controller-less simplicity.

### MONETISE: VOUCHERS. SOCIAL LOGIN
Monetise your Wi-Fi service: cnMaestro's Guest access feature supports splash page hosting, social login and payment gateway. All built-in power packed features available right on the controller! These features along with the ability to create time, rate and volume limited traffic profiles along with vouchers for temporary guest access makes the E410 ideal for Hotels, Coffee shops, Campgrounds, and Office guest Wi-Fi.

### INDOOR/OUTDOOR WI-FI MESH. FLEXIBILITY
Indoor meshing across multiple E410s or Indoor/Outdoor meshing across the Indoor E410 and the Outdoor E500 offers a convenient way to easily expand Wi-Fi coverage without wires.

### SERVICE AWARE WLANS. BETTER USER EXPERIENCE
Nothing is more frustrating than connecting to an Access point, but not getting to the Internet! When connection 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 select a different working neighbouring Access point.

### COVERAGE, CAPACITY. SPEED
The plenum rated E410, packs a max transmit power of 25 dBm, and is DFS certified to make use of additional reserved 5GHz DFS channels, offering more flexibility than ever for both coverage and capacity. Throughput management via Airtime fairness, increased performance by Automatic channel scanning (ACS), and higher client device speeds from Band steering ensure your network can adapt to the dynamics of ever changing client behaviours.

### HIGH DENSITY, HIGHLY AVAILABLE
A capacity of 256 max 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. ONE LOW PRICE.
The 802.11ac wave 2 E410 comes with a free controller, and no AP management license fees. No hidden charges. Affordable.

## SPECIFICATIONS

### ACCESS POINT

- Standards : IEEE 802.11a/b/g/n/ac Wave 2 Others: 802.11 h/d/r/u/w/
- Antenna : 2x2 MIMO streams
- Range : 180 m (650 Ft)
- Concurrent Clients : 256
- Max Data Rates : 1.3 Gbps (1,267 Mbps)
- SSID : 16 SSIDs across 2 radios
- Standards : 4.55 dBi (2.4 GHz)/4.25 dBi (5 GHz)
- Multi-Hop Mesh : Yes. Supported on Indoor & Outdoor access points
  Mesh auto-recovery supported
- Polarisation : Dual-linear
- Antenna Coverage : Omni (360°)
- Ethernet Ports : One (1) x 1 Gigabit Ethernet (10/100/1000 Mbps)
- Frequency bands : 2.4 GHz: 2400-2484 MHz
  5 GHz: 5150-5850 MHz with DFS band support
- Power Supply : Standard 802.3af injector (supplied) or any PoE switch
- Power Consumed : 13W (max)
- Dimensions (CM) : 17 (H) x 17 (W) x 4.1 (D) cm
- Weight : 384 grams
- Temperature : 0°C to +50°C
- LED : Single LED window with tri color (Amber, Blue, Green)
  display
- Max TX Power : +25 dBm
- Physical Lock : Kensington key hole

### WiFi FEATURES

- Controller modes : Autonomous Controller-less operations (E.g.: roaming),
  Cloud Managed. On-premise virtualised controller
- Secure WLA : WPA-TKIP, WPA2 AES, 802.1x,
  802.11w (Protected Management Frames)
- Hotspot 2.0/Passpoint: Yes
- Captive Portal : cnMaestro Controller, Stand-alone AP based.
  Redirection to external RADIUS, Server DNS logging
- Authentication : Secure Web paqte, RADIUS based 802.1x including
  EAP-SIM/AKA, EAP-PEAP, EAP-TTLS and EAP-TLS,
  MAC authentication (local database or External RADIUS
  server)
- Accounting : Yes. Supports RADIUS based accounting to multiple AAAs
- Scheduled SSID : Turn SSID ON/OFF on a daily/weekly/time of day basis
- VLAN : Dynamic VLAN assignment from RADIUS server,
  VLAN per SSID per user, VLAN load balancing
- Data Limiting : Dynamic rate limiting of client traffic per SSID and
  per client
- Subscriber QoS : WMM
- Client Isolation : Yes
- Controller-Less Fast : Yes. 802.11r, Opportunistic Key Caching supports,
  Roaming Enhanced roaming, Disconnect for sticky clients
- Airtime Fairness : Yes
- Meshing : Multi-hop meshing supported (3)

- ACS: Automatic : Yes. Set at start or run periodically
  Channel Selection
- NAT : Yes
- DHCP Server : Yes
- Firewall : Yes. NAT logging
- ACL, DNS-ACL : Yes. L2, L3 or DNS based access control
- Band Steering : Yes
- Band Balancing : Yes
- Airtime Fairness : Yes
- Tunneling : L2TP, L2oGRE, PPPoE
- Tools : Packet capture, IP connectivity, Wi-Fi analyser,
  Wireless Sniffer, Tech support (logs)
- Services : NTP server config, Syslog servers,
  SNMP traps support, DNS proxy
  cnPilot's critical resource service awareness
  feature reacts to the health of an external
  Gateway or AAA and turns SSID ON/OFF
- APIs : Presence Locationing API
- Certifications : FCC, ETSI, CE
  EN 60601-1-2 (Medical EMC)
  UL2043 Plenum rated

### cnMAESTRO WiFi CONTROLLER

- Cloud & On-Premises : Available in the Cloud or as a downloadable VMware®
  image (On-premises)
- Common Manager : Manage both cnPilot and Cambium's ePMP and
  PMP 450 radios
- Troubleshooting : Single screen wireless view, showing Wireless
  backhaul, Access point & clients
- Frictionless : Secure large scale bulk onboarding
  On-Boarding : Zero touch bulk configuration and provisioning
- Device Inventory : Inventory tracking and reporting
- Monitoring : Insightful status monitoring; rich visibility to device
  lifecycle, Alarms and events management –
  Critical/Major/Minor, Statistics graphs and table display
  Alarm traffic light display
- Key Stats Monitoring : 7 day historic stats
- Portal Hosting : Setup Hotspot portals segmented by SSIDs
- Voucher : Time and Rate limited Guest access portals with
  Vouchers for 1,000 client devices
- Social Login : Facebook, Google
- Site Grouping : Group sets access points for convenient management
- Client Insight : Shows client history with aggregate client manufacturer
  views
- Multiple Admins : Multiple admin provisioning per account
- Software Upgrade : Ability to upgrade multiple WiFi devices at a time

### ORDERING INFORMATION

- PL-E410PXXA-ROW : E410 with PoE injector
- PL-E410X00A-ROW : E410 No PoE injector

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### Why Rising Connection is using equipment designed and built by Cambium Networks?

- High quality and worldwide longevity track record of installations across a diverse application base
- Using establish world best practices in design and materials with full support of both Australian and International Standards
- Constant evolution of hardware and improvements in firmware for the benefit of the customer
- Established interoperability with various equipment and propriety security systems
- Full portfolio of solution development services and cloud management

### This demonstrates to Rising Connection that you will have the Quality, Reliability and Product Support.

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