cnPilot™ e410, e600 Indoor Wi-Fi Access Points

802.11ac Wave 2

QUICK LOOK:

Designed to scale from small enterprises to K12 schools, the e410 and e600 feature an easy-to-install integrated bracket and is enterprise grade 802.11ac Wave 2.

e410 and e600 share a common industrial design for repeatable and predictable installation in any enterprise or business. Both access points (AP) can be managed by cnMaestro cloud, on-premises cnMaestro, a private datacenter or as a standalone AP.

	e410	e600
802.11 a/b/g/n/ac Wave 2	✓	✓
5 GHz / 2.4 GHz streams	**2x2 / 2x2**	**4x4 / 2x2**
Gigabit Ethernet	**1**	**2**

cnMaestro READY

CLOUD-MANAGED ACCESS

cnMaestro™ provides end-to-end cloud Dashboard for Wi-Fi, Ethernet, and fixed wireless broadband:

- Zero-touch onboarding
- Inventory tracking & monitoring
- Mass configuration & upgrade
- Dashboard views with alarms
- Troubleshooting
- Hierarchical device organization

cnMaestro Essential cloud management is included at no additional cost. No setup fee, no license, and no recurring cost.

CONTROLLER-LESS ROAMING, POWERFUL SIMPLICITY

cnPilot e410 and e600 include controller-less distributed intelligence for seamless roaming and enhanced roaming for up to 1,000 devices. cnMaestro management provides end-to-end visibility and zero-touch provisioning across thousands of sites.

MONETIZE: VOUCHERS. SOCIAL LOGIN

A hotspot portal can be designed in the cloud and distributed to each site's access point with a single touch. Wi-Fi hotspot capabilities support splash page hosting, social login, temporary access vouchers, and multiple credit card payment gateways. Control time, rate and data volume traffic profiles.

HIGH CAPACITY AND RELIABILITY

Airtime fairness, standardized beamsteering, and MU-MIMO increase network capacity while automatic RF management monitors performance and optimizes the network to avoid interference. Detailed network statistics, utilization graphs, and integrated troubleshooting ensure service is always on.

cnPilot™ e410 and e600 Indoor Wi-Fi Access Points

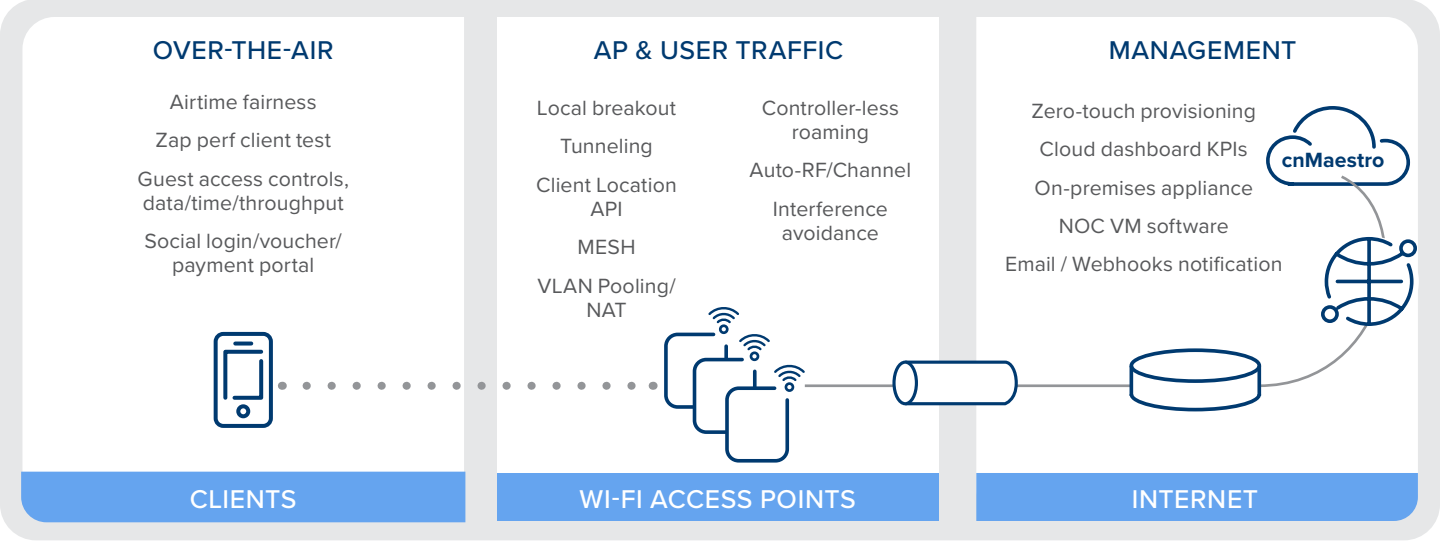
Access Point Specifications

	e410 (Hardware specs subject to change)	**e600**
US-FCC	CH 1–11, 36–64, 100–144, 149–165	CH 1–11, 36–64, 100–144, 149–165
ISED Canada	CH 1–11, 36–64, 100–116, 149–165	CH 1–11, 36–64, 100–116, 149–165
EU-ETSI	CH 1–13, 36–64, 100–140	CH 1–13, 36–64, 100–140
ROW	CH 1–13, 36–64, 100–144, 149–165 2400-2483.5 MHz, 5150-5850 MHz *Individual country limitations apply*	CH 1–13, 36–64, 100–144, 149–165 2400-2483.5 MHz, 5150-5850 MHz *Individual country limitations apply*
DFS	Channels to be released later	
Radios	1 x 5 GHz radio (802.11 a/n/ac Wave 2), 2x2 1 x 2.4 GHz (802.11 b/g/n), 2X2 SU-MIMO / MU-MIMO: 2 streams	1 x 5 GHz radio (802.11 a/n/ac Wave 2), 4x4 1 x 2.4 GHz (802.11 b/g/n), 2x2 SU-MIMO / MU-MIMO: 4 streams
Wi-Fi	802.11 a/b/g/n/ac	802.11 a/b/g/n/ac
SSID Security	WPA2 (802.11i), WPA2 Enterprise (802.1x/EAP), WPA PSK, Open	
Max PHY Rate	**2.4 GHz:** 400 Mbps **5 GHz:** 867 Mbps	**2.4 GHz:** 400 Mbps **5 GHz:** 1733 Mbps
Ethernet	One IEEE Gigabit Ethernet auto sensing	Two IEEE Gigabit Ethernet auto sensing
USB Ports	–	1 USB 2.0 port
Antenna	Internal omni-directional **2.4 GHz:** 5.24 dBi **5 GHz:** 5.47 dBi	Internal omni-directional **2.4 GHz:** 5.28 dBi **5 GHz:** 6.11 dBi
Max EIRP	**2.4 GHz:** 29.50 dBm **5 GHz:** 30 dBm (EIRP limited by country regulations)	**2.4 GHz:** 29.28 dBm **5 GHz:** 34.11 dBm (EIRP limited by country regulations)
WLAN	256 clients, 32 SSIDs (16 per radio) WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF	512 clients, 32 SSIDs (16 per radio) WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF
Power	802.3af powered device Typical load: 9 W, Max: 11.5 W	802.3af or 802.3at powered device Typical load: 12 W, Max: 22 W 2.1 mm 12 VDC barrel connector
Mounting	Desktop, Wall, cieling tile mount - included T-bar mount 14 mm x 24 mm x 38 mm (0.55 in x 0.94 in x 1.5 in) Ceiling Tile mount included Kensington lock slot	Desktop, Wall, cieling tile mount - included T-bar mount 14 mm x 24 mm x 38 mm (0.55 in x 0.94 in x 1.5 in) Ceiling Tile mount included Kensington lock slot
Dimensions	180 mm x 180 mm x 42mm (7.09 in x 7.09 in x 1.65 in)	180 mm x 180 mm x 42mm (7.09 in x 7.09 in x 1.65 in)
Weight	384 g (0.85 lb)	400 g (0.88 lb)
LEDs	Single Tri-color LED (amber, blue, green)	Single Tri-color LED (amber, blue, green)
Ambient Operation Temperature	0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°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
MTBF	1.5m hours	1m hours
Certifications	Wi-Fi Alliance 802.11 a/b/g/n/ac, Passpoint 2.0 FCC, ETSI, CE, EN 60601-1-2, IEC62368 UL2043	Wi-Fi Alliance 802.11 a/b/g/n/ac, Passpoint 2.0 FCC, ETSI, CE, EN 60601-1-2, IEC62368 UL2043

cnPilot™ e410 and e600 Indoor Wi-Fi Access Points

Management

Adaptive cnPilot Network



Cambium cnMaestro uses a distributed intelligence architecture with a cloud-first cnMaestro management and edge-intelligent access points that self-optimize for the RF environment. cnMaestro and cnPilot access points provide automatic RF management and seamless roaming, with a cloud-first, multi-site management for up to 10,000 devices and hundreds of thousands of connected clients. cnMaestro delivers single pane-of-glass management for Cambium broadband fixed wireless, cnMatrix Ethernet switches, enterprise-grade Wi-Fi access points and service provider residential routers.

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	Hotspot 2.0/Passpoint 2.0
Accounting	RADIUS accounting, load balancing AAA servers, Dynamic Authorization COA, DM
Service Availabilty	Critical network resource monitor with SSID shutdown

cnPilot™ e410 and e600 Indoor Wi-Fi Access Points

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

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 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

Standards

Wi-Fi Protocols	VHT MCS rates, 16-QAM, 64-QAM, 256-QAM, HT20/40/80 MHz
	Transmit beamsteering, Airtime Fairness, Packet Aggregation (AMSDU, AMPDU) RIFS, STBC, LDPC, 802.11k, 802.11v
	MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM. IEEE 802.11d/e/h/i/k/r/u/v