

cnPilot e500 Outdoor Omni

Gigabit IP67 802.11ac Outdoor Wi-Fi Access Point



Omni coverage for Enterprise campuses, Public Wi-Fi, Hospitality, Educational institutions, Industrial campuses or just about any demanding outdoor environment requiring cost-effective, controller managed WLAN Access Points.

HIGHLIGHTS

Operational superiority - Supporting 256 max concurrent client associations, 16 SSIDs, WPA-2 encryption, Dynamic VLANs, DFS channels, Access control lists (ACL), zero touch provisioning and more, the 802.11ac e500 is the essential workhorse for today's demanding high density outdoor Wi-Fi networks

High performance Wi-Fi network - All cnPilot's Enterprise Access Points (APs), support features like controller- less roaming, dynamic channel selection, automatic transmit power control, band steering, and more – essential features for easy Wi-Fi operations

Mesh Rapidly setup multi-hop mesh networks either dedicating one radio (e.g.: 5 GHz) for mesh backhaul, or using both bands for client access at the same time

Wireless Backhaul Integration – the aux PoE port on the e500 offers PoE out eliminating the need for a second power line – perfect for powering on a standard 802.3af camera, or powering on Cambium's PMP450 or ePMP backhaul subscriber modules (SMs) for wireless backhaul enabled Wi-Fi hotspots

Resilience - Dual on-board Active/Standby memory banks ensure higher availability. The e500 can store two versions of the software and if needed fall back to a working operational software, reducing the likelihood of site visits and increasing network up-time.

DESIGNED FOR THE OUTDOORS

- 802.11ac, 256 users, 16 SSIDs
- Omni coverage
- UV rated IP-67 enclosure
- Operating Temp: -30C to +60C
- Electrical heater for cold start
- Ruggedized - ESD protection, Industrial grade components
- Packaged with wall mount brackets
- Special LTE coexistence filters
- Light weight 881g

cnMAESTRO™ – WI-FI CONTROLLER

- Guest Access: Custom Splash pages, Vouchers, Social login
- Zero-touch Provisioning
- Inventory tracking
- Map location
- Monitoring: key Stats, Alarms
- Mass (bulk) upgrade
- RESTful APIs, Reporting.
- Integrated troubleshooting: Wi-Fi APs, Clients & Cambium SMs
- Available in Cloud or as On-premises (NOC) Virtual controller



SPECIFICATIONS

Access Point Specifications

Standards	IEEE 802.11a/b/g/n/ac IEEE 802.11d/e/h/i/k/r/u/v/w Modulation: BPSK, QPSK, CCK, 16/64/256-QAM Radio modes : DSSS, OFDM	Frequency Bands	2.400 to 2.2484 GHz (Country-specific limits apply, some bands require DFS) 5.150 to 5.250 GHz 5.250 to 5.350 GHz 5.470 to 5.725 GHz 5.725 to 5.850 GHz
MIMO, Streams	2x2:2 MIMO	Power Supply	802.3af PoE Injector, or PoE switch. 802.3at or PoE+ if using PoE-Out Aux port.
Channel Width	20MHz, 40MHz, 80MHz	Dimensions	30 x 20.4 x 6.5 cm (11.8 x 8 x 2.55 Inch)
Concurrent Clients	256	Weight	881 g (1.94 lb)
SSIDs	16	Operating Temperature	-30°C to +60°C (-22°F to +140°F)
Antenna	Dual polarized, Omnidirectional, Integrated	Operating Humidity	5% to 95% non-condensing
Transmit Power (conducted total)	2.4GHz : 29dBm 5GHz : 28dBm	Power Consumed	13W (max, without PoE-out) 8W (typical)
Antenna Gain	2.4GHz : 5dBi 5GHz : 5dBi	Secure Mounting	Kensington Key Slot
Max Data Rate	2.4GHz : 300Mbps 5GHz : 867Mbps	Environment Rating	IP67
LED	Two multi-color software controlled LEDs	MTBF	1,611,174 Hours
Interference Mgmt	Hardware LTE Filtering	PoE-Out	Aux Port supports Cambium and 802.3af modes
Ethernet Ports	Two auto-sensing auto MDIX Gigabit Ethernet (10/100/1000 Mbps) RJ45 Ports	Reset Button	Supported
Radio Features	Maximum ratio combining (MRC) Cyclic delay/shift diversity (CDD/CSD) Space-time blocking coding (STBC) Low-density parity check (LDPC) Packet Aggregation: A-MPDU, A-MSDU	Certifications	FCC, CE, IC, UL, EN60601-1-2 (Medical EMC), WEEE/RoHS compliance
Wi-Fi Alliance	Wi-Fi certified a,b,g,n,ac WPA2 – Enterprise, Personal WMM, Passpoint	Mounting Options	Wall and Pole mount bracket. Supports Poles with 1.5” and 3” Diameter.

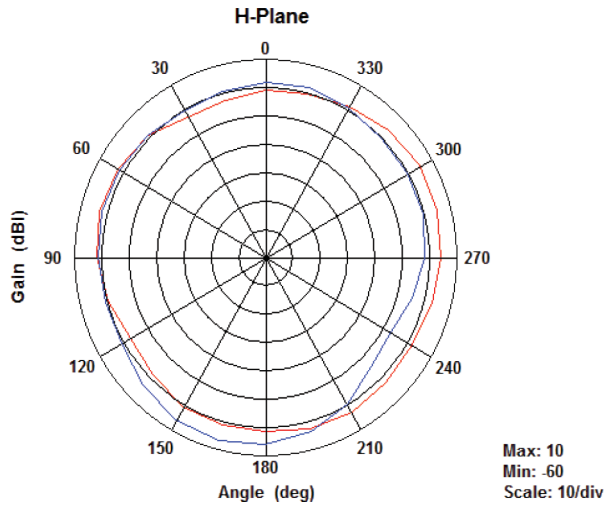
Wi-Fi Features

Management Modes	cnMaestro cloud managed cnMaestro on-premises VM controller managed Autopilot (AP as controller) Standalone with AP GUI (http/https), CLI (telnet/ssh)	Wireless Security	WPA-TKIP, WPA2-AES, 802.11i WPA-PSK, WPA2-PSK, WPA2-Enterprise 802.1x Authentication with various EAP types (EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, EAP-AKA, EAP-AKA', EAP-FAST Protected Management Frames (802.11w)
RF Management	AutoRF automatically manages channel and power	Dynamic SSID Service	By time/date, by monitored host.
Guest Access Captive Portal	cnMaestro Controller Portal Integrates with 3 rd party Guest Access Portals Built-in Portal on AP LDAP & RADIUS authentication Walled Garden with DNS whitelist Wireless as well as Wired devices supported.	MAC Authentication	On-AP MAC filtering list. On-Controller MAC filtering list. RADIUS MAC Authentication. MAC Authentication fallback to Captive Portal
Rate Limiting	Per-client, Per-WLAN static and dynamic rate limiting	Firewall	Layer-2, Layer-3, DNS ACL. DoS Attack Protection.
Client Isolation	On AP, Network-wide.	3G/4G/LTE Offload	Passpoint (Hotspot 2.0)
Fast Roaming	802.11r, Opportunistic Key Caching, Enhanced Roaming	DHCP Relay	Supported, with Option-82 customization
Airtime Mgmt	Airtime Fairness, Band Steering, Band Balancing	NMS Monitoring	SNMP v1, v2c, v3
AAA Support	RADIUS Authentication, Accounting, Dynamic Authorization (CoA, DM). Server failover, load-balancing	Client APIs	Client Presence/Location API DNS, NAT and TCP Connecting Logging
QoS	802.11e/WMM QoS. DSCP/ToS mapping.	Time Synchronization	Auto (from controller), NTP
Ethernet (L2) Services	802.1p/802.q, RADIUS assigned VLAN, VLAN per SSID, VLAN pooling. LLDP. IGMP Snooping (v1/v2/v3)	Troubleshooting Tools	Packet Capture, Spectrum Analyzer, Ping, Traceroute, Syslogs
Mesh	WDS Mesh with Single and Multiple radio hops.	Traffic Tunnels	L2TP, L2oGRE, PPPoE
Network Services	NAT, DHCP Server		

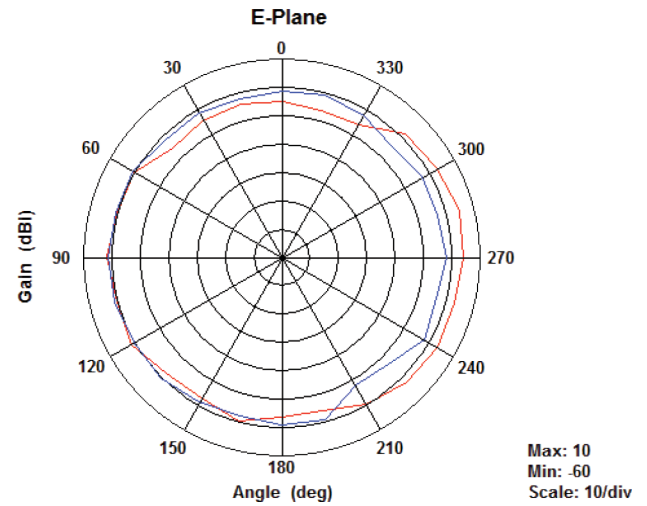
SPECIFICATIONS

2D Gain Patterns

2.4 GHz Azimuth (Horizontal) Gain Pattern

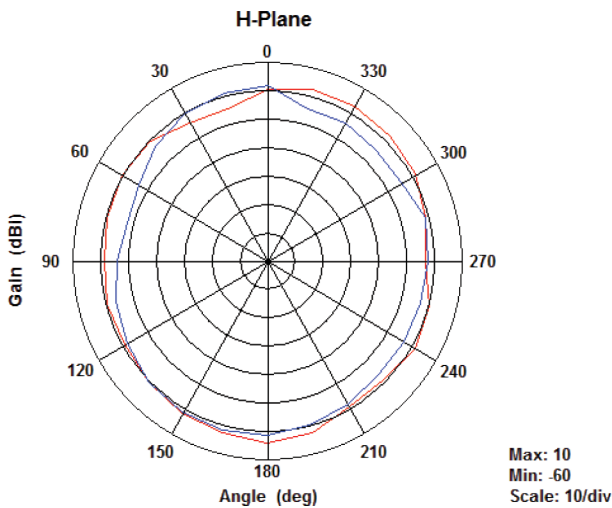


2.4 GHz Elevation (Vertical) Gain pattern

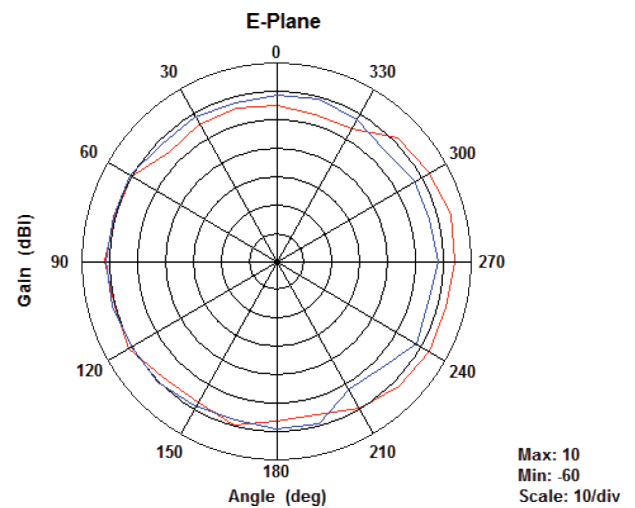


Notation 2.4 GHz: **Red:** Antenna 1, **Blue** Antenna 2

5 GHz Azimuth (Horizontal) Gain Pattern



5 GHz Elevation (Vertical) Gain pattern



Notation: **Red:** Antenna 3, **Blue** Antenna 4

E500 ORDERING INFORMATION: CNPILOT OUTDOOR E500

Regulatory Model Number (common to all SKUs): C000100P500A

Sales part #

PL-E500XXYA-<US/EU/CA/IL/JP/EG/LK/RW>

Region

XX = if this position has a two-digit country code, then That SKU includes a country specific AC line cord
Y = if this position has a "C", then that SKU includes a PoE Injector and localized AC line cord
The following countries require a unique two-digit regulatory country code appended to the part number:
United States (US), Canada (CA), Europe (EU), Israel (IL), Egypt (EG), Sri Lanka (LK). For other certified countries, use the Rest of World (RW) two-digit country code

PL-E500NPSA-RW

e500 without a PoE injector. Available in RoW model

Discover more information on cnPilot at: <http://community.cambiumnetworks.com/>