Cambium Networks™

cnPilot e700
Outdoor Omni

Gigabit IP67, 802.11ac wave 2,
8 dBi Outdoor Access Point

Standards-based beam forming for superior outdoor Wi-Fi

COST-EFFECTIVE, CONTROLLER-MANAGED WLAN ACCESS POINTS FOR:

- Enterprise and industrial campus
- Hospitality
- Higher Education campus
- Public Wi-Fi

Operational superiority IP67 weather resilient Outdoor Access Point (AP) with 512 max concurrent client associations, 16 SSIDs, WPA-2 encryption, Meshing, Dynamic VLANs, DFS channels, Access control lists (ACL), zero touch provisioning and more – the 802.11ac wave2 powered e700 is perfect for today's demanding high density outdoor Wi-Fi networks.

High performance Wi-Fi Standards based beamforming, on 5 GHz over a 4x4 Tx/Rx antenna array, can steer beams to the target client device delivering superior performance under high interference RF environments in both downlink and uplink* directions. Enterprise grade controller-less roaming, dynamic channel selection, automatic transmit power control, and more such cnPilot platform features ensure a high grade superior Wi-Fi network

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

Wireless Backhaul Integration Roll out Wi-Fi networks rapidly with Cambium's wireless backhaul powered from the aux PoE Out port on the e700 eliminating the need for a second power line. The aux PoE Out port can also power an 802.3af camera when security monitoring is needed near the hotspot

Resilience Dual on-board Active/Standby memory banks ensure higher availability. The e700 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

For client devices supporting 802.11ac wave2 standards
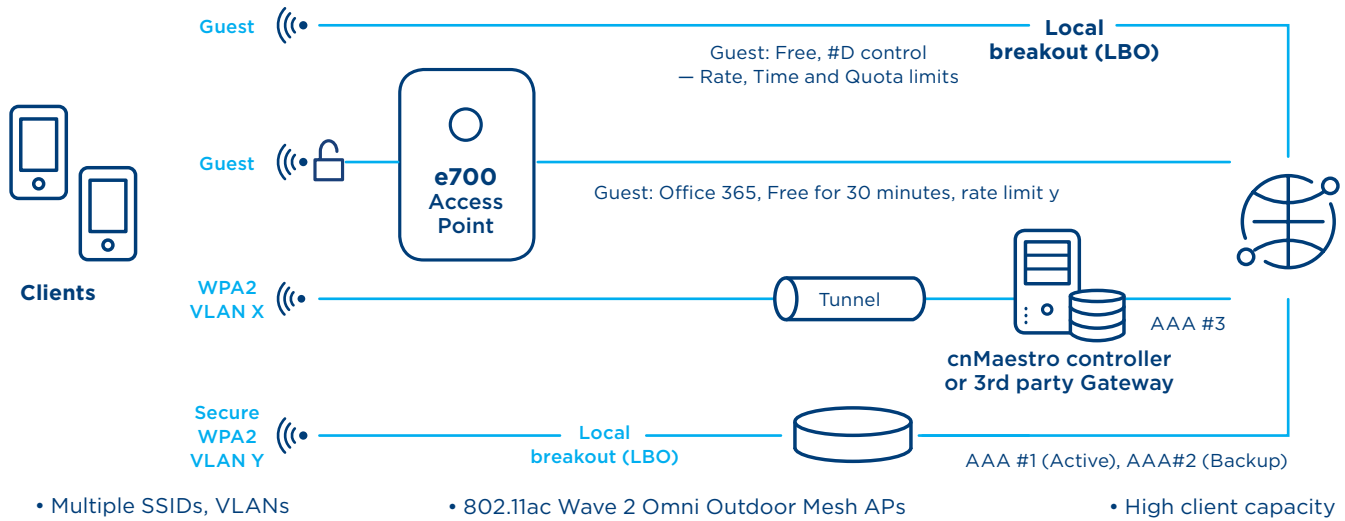
DESIGNED FOR THE OUTDOORS

- 802.11ac, 512 users, 16 SSIDs
- Omni antenna
- UV rated IP-67 enclosure
- Max Operating Temp range: -40°C ~ +65°C
- Operating humidity : 10% to 95%
- Electrical heater for cold start
- Ruggedized; ESD protection, Industrial grade
- Packaged with wall mount brackets
- Special LTE resilience filtering
- 315 x 215 x 66 mm | 3.174 lbs (1700 gms)

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
- Integrated troubleshooting: Wi-Fi APs, Clients & Cambium SMs
- Available in Cloud or as On-premises (NOC) Virtual controller

1 CLOUD **2** LOCAL CONTROLLER **3** autoPILOT

Multiple SSIDs (16), Multiple VLANs

Guest

Guest: Free, #D control — Rate, Time and Quota limits

Local breakout (LBO)

Guest

e700 Access Point

Guest: Office 365, Free for 30 minutes, rate limit y

WPA2 VLAN X

Tunnel

AAA #3

cnMaestro controller or 3rd party Gateway

Clients

Secure WPA2 VLAN Y

Local breakout (LBO)

AAA #1 (Active), AAA#2 (Backup)

• Multiple SSIDs, VLANs

• 802.11ac Wave 2 Omni Outdoor Mesh APs

• High client capacity

SPECIFICATIONS

ACCESS POINT SPECIFICATIONS

Frequency Bands	2.4 GHz: 2.4 – 2.4835 GHz Channels 1 – 13 (ETSI/CE), Channels 1 – 11 (US) 5 GHz: 5.15 – 5.85 GHz
SSID Security	WPA-2 (802.11i): WPA2-Enterprise (802.1x/EAP) & WPA2-Preshared-keys, Open
Max SSIDs	16
Max Concurrent Clients	512
Max Data Rates	2.4 GHz: 300 mbps. 5 GHz: 867 Mbps. Max combined rate: 1.16 Gbps
Ethernet Ports	Dual Gigabit Ethernet ports (2 x 10/100/1000Base-T)
Antenna	Dual polarized. 2x2 MIMO. Integrated Omni (360°) antenna
Antenna Gain	8 dBi (2.4 GHz and 5 GHz)
Power Supply	56V/30W Gigabit passive PoE injector
POE Out	Aux port: capable of 802.3af out or Canopy power (for supported Cambium ePMP or PMP450 SMs)
Transmit Power	25 dBm @ 2.4GHz 28 dBm @ 5 GHz
Power Consumed	Typical: 8W Max: 12.95W (no auxiliary device connected)
Dimensions (cm)	315 x 215 x 66 mm (without bracket)
Weight	3.174 lbs (1700 gms) without bracket
Operating Temperature	-40°C ~ +65°C (when aux PoE out port is not used) or -40°C ~ +60°C* (when aux PoE out port is used)
Operating Humidity	10% ~ 95%
Mounting Options	Pole mount bracket (included) or wall-mount (with included bracket or without)
LTE Co-Existence	Special filter for rejecting interference on 2.4 GHz from adjacent LTE bands 38, 40
Phyiscal Security	Kensington Lock bracket
Visual Status	Two (2) multi-color LEDs indicating Access Point & cnMaestro connectivity status

SPECIFICATIONS

WI-FI FEATURES

Controller modes	• Autonomous Controller-less operations (E.g.: roaming) • Cloud Managed • On-premise virtualized controller
Secure WLAN	WPA-TKIP, WPA2 AES, 802.1x 802.11w (Protected Management Frames)
Hotspot 2.0	Passpoint supported
Captive Portal	• cnMaestro Controller • Redirection to external RADIUS •Stand-alone AP based • Server DNS logging
Authentication	• RADIUS based 802.1x including EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, and EAP-TLS • MAC auth (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
Guest Access	Yes. With Active Directory Integration • Vouchers • Rate limiting • Splash page creation on cnMaestro
VLAN	VLAN pooling, Dynamic VLAN from RADIUS server. VLAN per SSID per user
Data Limiting	Dynamic rate limiting of client traffic per SSID
Subscriber QoS	WMM
Client Isolation	Yes
Controller-less Roaming	Yes. 802.11r, Opportunistic Key Caching supports Enhanced roaming. Disconnect for sticky clients
Airtime Fairness	Yes

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Mesh	Multi-hop meshing	
ACS: Automatic Channel Selection	autoTune: Autonomous dynamic off-channel scans w/o disconnecting clients. Periodic scans and scheduled scanning	
Automatic Tx Power Control	autoRF: Autonomous controller-less transmit power control	
NAT	Yes	
DHCP Server	Yes	
Firewall	Yes. NAT logging	
ACL, DNS-ACL	Yes. L2, L3 or DNS based access control	
Band Balancing	Yes	
Tunneling	• L2TP • L2oGRE • PPPoE	
Tools	• Packet capture • IP connectivity • Wi-Fi analyzer • Sniffer • Auto logging • Open source ZapD compliant performance test tool	
Services	NTP server config Syslog servers SNMP traps support DNS proxy	cnPilot's dependent resource state awareness feature (ADRES) turns SSID ON/OFF based on underlying resource connectivity state
APIs	Presence Location APIs	
Certifications	FCC, ETSI, CE EN 60601-1-2 (Medical EMC)	

cnMAESTRO WI-FI CONTROLLER

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Common Manager	Single pane of glass: Controller for Wi-Fi and network manager for ePMP and PMP wireless backhaul products
On-Boarding	Secure zero touch fast on-boarding
Provisioning	Easy zero touch virtual network provisioning Provision before install (pre-provision)
Device Inventory	Inventory tracking
Troubleshooting	ezDetect: Advanced end to end troubleshooting of WiFi Access Point and Client devices on one single screen. Extends to Wireless backhaul (PTP), Wi-Fi Hotspot & Clients. Includes Packet capture and Wireless Analyzer functions
Intuitive Views	Map location . Hierarchical Dashboard views
Client Insight	Client history with client manufacturer view
Monitoring & Alarms	Alarms and events management – Critical/Major/Minor Key statistics graphs and *sticky* alarm summary display
Configuration	GUI based configuration or template based configuration options
Software Upgrade	Bulk upgrade with ability to upgrade multiple WiFi APs
Multiple Admins	Multiple admin provisioning per account
Guest Portal	Customizable portal with session controls by Time, Rate and Bytes. Social login, SMS Auth, Vouchers

SPECIFICATIONS

2D Gain Patterns

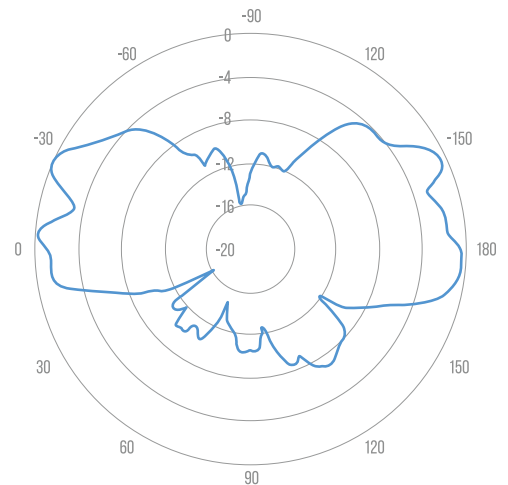2.4 GHz Azimuth (Horizontal) Gain Pattern
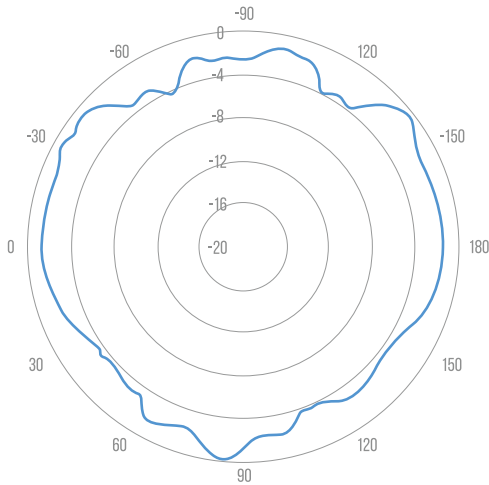
2.4 GHz Elevation (Vertical) Gain pattern
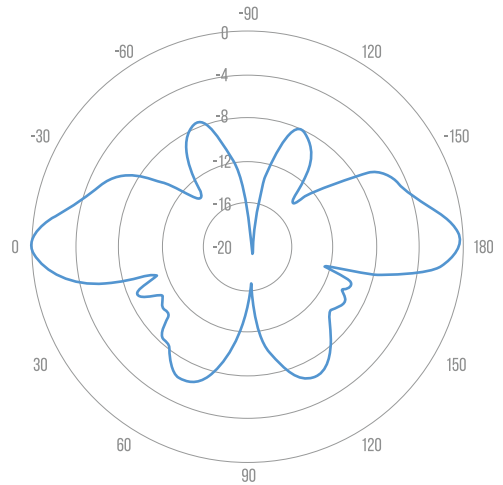
5 GHz Azimuth (Horizontal) Gain Pattern
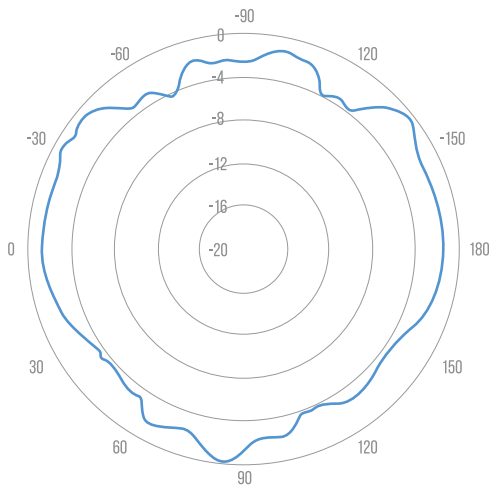
5 GHz Elevation (Vertical) Gain pattern

ORDERING INFORMATION: cnPILOT OUTDOOR E502S

Regulatory Model Number (common to all SKUs): cnPilot e700 Outdoor

Sales part #	Region
PL-E700PXXA-<US/EU/ROW>	e700 for US, EU or RoW with PoE injector. XX = US, EU, IN (India), UK (The United Kingdom), AN (Australia & NZ), CN (China), BR (Brazil) etc.
PL-E700NPSA-<US/EU/ROW>	e700 without a PoE-In injector

Discover more information on cnPilot at: **community.cambiumnetworks.com/**

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