

# cnPilot e700 Outdoor Omni

Gigabit IP67, 802.11ac wave 2, 8 dBi

Outdoor Wi-Fi Access Point

Standards-based beam forming for superior outdoor Wi-Fi



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

- Enterprise and industrial campus
- Higher Education campus
- Hospitality
- 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 supports both Cambium-PoE as well as standard 802.3af, so can power a 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.

## 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

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



## SPECIFICATIONS

### Access Point Specifications

<b>Standards</b>	IEEE 802.11a/b/g/n/ac Wave2 IEEE 802.11d/e/h/i/k/r/u/v/w Modulation: BPSK, QPSK, CCK, 16/64/256-QAM Radio modes : DSSS, OFDM	<b>Frequency Bands</b>	2.400 to 2.2484 GHz <i>(Country-specific limits apply, some bands require DFS)</i> 5.150 to 5.250 GHz 5.250 to 5.350 GHz 5.470 to 5.725 GHz 5.725 to 5.850 GHz
<b>MIMO, Streams</b>	2.4GHz : 2x2:2 MU-MIMO 5GHz : 4x4:4 MU-MIMO	<b>Power Supply</b>	802.3at PoE Injector, or PoE+ switch. 12V DC. 802.3af with 17dBm radio power per chain
<b>Beamforming</b>	Supported	<b>Dimensions</b>	31.5 x 21.6 x 6.6 cm (12.04 x 8.5 x 2.59 Inch)
<b>Channel Width</b>	20MHz, 40MHz, 80MHz	<b>Weight</b>	1700 gm (3.74 lb)
<b>Concurrent Clients</b>	512	<b>Operating Temperature</b>	-40°C to +65°C (-40°F to +149°F)
<b>SSIDs</b>	16 SSIDs	<b>Operating Humidity</b>	5% to 95% non-condensing
<b>Transmit Power</b> <i>(conducted total)</i>	2.4GHz : 25dBm 5GHz : 28dBm	<b>Power Consumed</b>	25W (max) 37.5W (if auxiliary device powered on PoE-out)
<b>Antenna Gain</b>	2.4GHz : 8dBi 5GHz : 8dBi	<b>LED</b>	Two Multi-color software controlled LEDs
<b>Max Data Rate</b>	2.4GHz : 400Mbps 5GHz : 1733Mbps	<b>Secure Mounting</b>	Kensington Key Slot, Torx Screw mounting.
<b>Antenna</b>	Dual linear-polarized, Omnidirectional, integrated	<b>MTBF</b>	304,721 hrs at 65C, 2,283,737 hrs at 25C
<b>Bluetooth</b>	Bluetooth 4 BLE Radio.	<b>Environment rating</b>	IP67
<b>Ethernet Ports</b>	Two auto-sensing Gigabit Ethernet (10/100/1000 Mbps)	<b>PoE-Out</b>	Aux Port supports Cambium and 802.3af modes
<b>Radio Features</b>	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	<b>Reset Button</b>	Supported
<b>Wi-Fi Alliance</b>	Wi-Fi certified a,b,g,n,ac WPA2 – Enterprise, Personal WMM, Passpoint	<b>Certifications</b>	FCC, CE, IC, UL, EN60601-1-2 (Medical EMC), WEEE/RoHS compliance,
		<b>Mounting Options</b>	Wall and Pole mount bracket. Pole size supported: 38.1mm to 76.2mm.

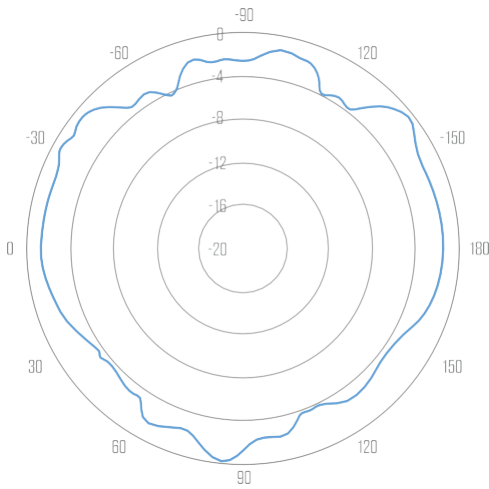
### Wi-Fi Features

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

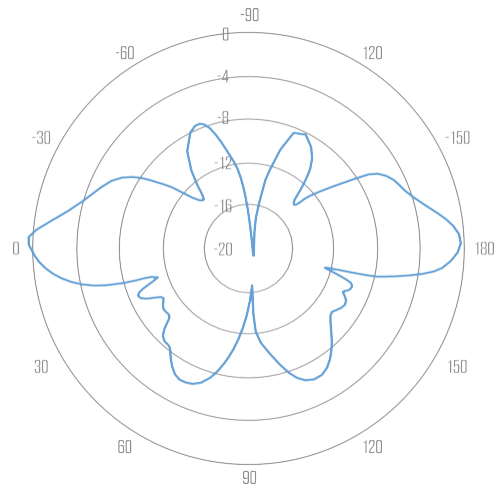
# SPECIFICATIONS

## 2D Gain Patterns

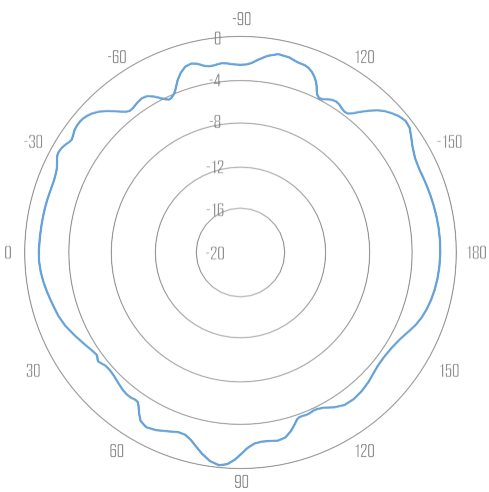
2.4 GHz Azimuth (Horizontal) Gain Pattern



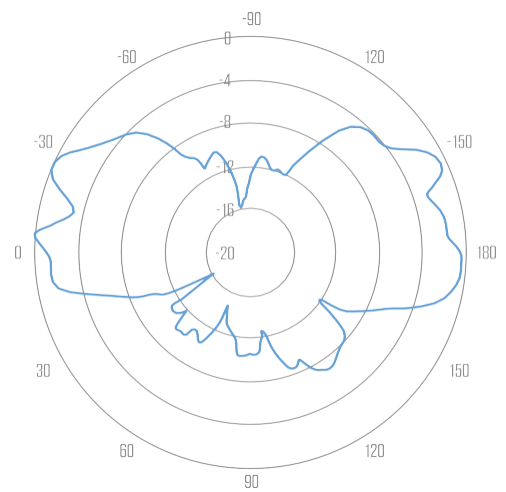
2.4 GHz Elevation (Vertical) Gain pattern



5 GHz Azimuth (Horizontal) Gain Pattern



5 GHz Elevation (Vertical) Gain pattern



### ORDERING INFORMATION: cnPILOT e700

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

Sales part #

Region

PL-E700YXXA-<US/EU/CA/IL/JP/EG/LK/RW>

Y = if this position has a "p", then that SKU includes a PoE Injector and localized AC line cord  
 Y = if this position has a "X", then that SKU does not include a PoE Injector or AC line cord. YY will always be "00"  
 XX = if this position has a two-digit country code, then a localized AC line cord is included for the specified country code 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

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