

cnPilot e502S

Outdoor Sector AP

IP67 802.11ac 30° Outdoor Narrow Sector Access Point



Perfect for high density applications – stadiums, event coverage, public Wi-Fi in high noise environments, narrow aisle coverage in warehouses, and more – requiring cost-effective, controller managed WLAN access points

HIGHLIGHTS

Operational superiority - The e502S with an integrated sector antenna supports 256 max client associations, 16 SSIDs, WPA-2 encryption, Dynamic VLANs, DFS channels, Access control lists (ACL), and more. The 802.11ac e502S 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 e502S 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 PMP 450 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 e502S 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. Standard 3 year Warranty included, for peace of mind.

DESIGNED FOR THE OUTDOORS

- 802.11ac, 256 users, 16 SSIDs
- 30° coverage
- 23 dB front-back ratio
- Tx Power: 29 dBm
- Ant gain: 12.5/15.9 dBi
- UV rated IP-67
- Operating Temp: -30°C ~ +60°C
- Electrical heater for cold start
- Industrial grade components
- Packaged with wall mount brackets
- Special LTE coexistence filters
- Light weight ~1Kg

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
- Controller: Cloud or Virtual On-premises (NOC) controller

SPECIFICATIONS

Access Point Specifications

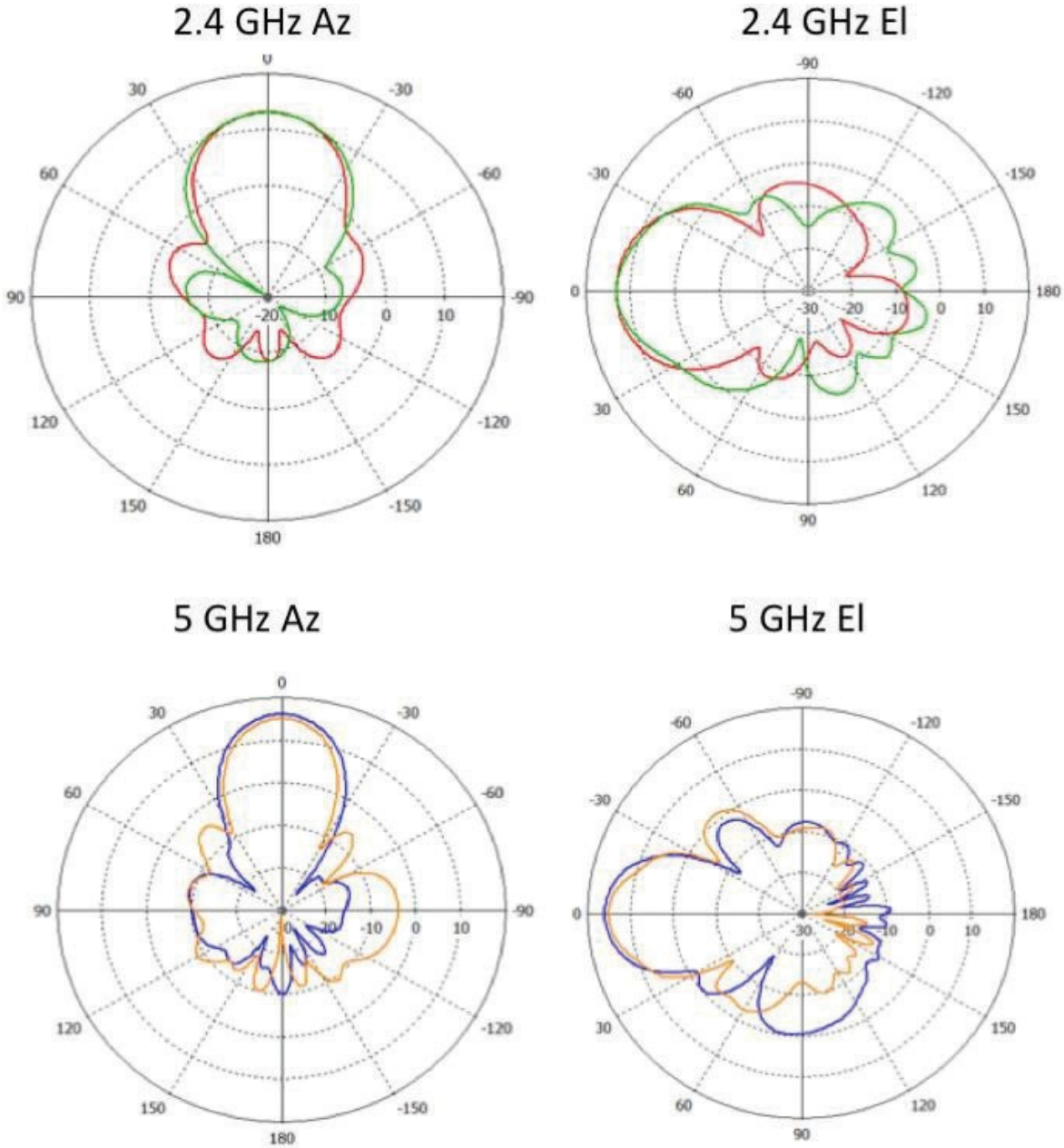
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|---|---|------------------------------|---|
| Standards | IEEE 802.11a/b/g/n/ac IEEE 802.11d/e/h/i/k/r/u/v/w Modulation: BPSK, QPSK, CCK, 16/64/256-QAM Radio modes : DSSS, OFDM | Frequency Bands | 2.400 to 2.2484 GHz <i>(Country-specific limits apply, 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 |
| 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 | 1.3 Kg (2.8 lb) |
| SSIDs | 16 | Operating Temperature | -30°C to +60°C (-22°F to +140°F) |
| Antenna | Dual polarized, Omnidirectional, Integrated | Operating Humidity | up to 95% non-condensing |
| Transmit Power <i>(conducted total)</i> | 2.4GHz : 29dBm 5GHz : 28dBm | Power Consumed | 13W (max, without PoE-out) 8W (typical) |
| Antenna Gain | 2.4GHz : 12.8dBi 5GHz : 16.9dBi | Secure Mounting | Kensington Key Slot |
| Max Data Rate | 2.4GHz : 300Mbps 5GHz : 867Mbps | Environment Rating | IP67 |
| LED | Two multi-color software controlled LEDs | MTBF | 2,331,610 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

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|------------------------------------|--|------------------------------|---|
| 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 Radiation Patterns



ORDERING INFORMATION: cnPILOT OUTDOOR e502S

Regulatory Model Number: C000100P502A

Sales part # Description

PL-502SYXA-<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/>