

# cnPilot™ r195P Wi-Fi Router

For Residential and Small Business, 802.11ac Dual-Radio, 2x2

#### QUICK LOOK:

- Dual-radio, 802.11ac (5 GHz/2.4 GHz)
- Five Gigabit Ethernet ports
- High-gain duplex antennas for extended range
- TR-069, TR-098, TR-0104, TR-0106, TR-0143
- r195P features 30V power out, ATA ports



#### EXTEND BROADBAND WIRELESS FOR RESIDENTIAL WLAN

The r195P provides robust Wi-Fi performance to match and exceed the expectations of the modern family anywhere on the globe. As social media, streaming media, work-from-home and school-from-home increase, the need for high-performance Wi-Fi is here today. Don't be trapped by old 802.11n technology.

With five Gigabit Ethernet ports and dual WLAN radios, the r195P easily connects all the devices in a home, providing full home coverage from a single Wi-Fi router. For larger homes, extend coverage with WDS MESH to link two Wi-Fi routers together; for example, one r195P can extend Wi-Fi coverage to a remote r195W.

r195P delivers two ATA ports for VoIP, and Cambium 30V power out for a Cambium PMP or ePMP fixed wireless subscriber module.

#### PART OF THE CAMBIUM NETWORKS WIRELESS FABRIC

Service providers that leverage the power of cnMaestro™ to manage a broadband network will be able to integrate the r195P into the wireless fabric. The cnMaestro web-first interface features zero-touch configuration, stateful alarms & dashboard KPIs, and device health & inventory reports.





## Manage with cnMaestro™

cnMaestro is a simple, unified, end-to-end management system for Cambium Networks' wired and wireless portfolio: Enterprise Wi-Fi, Switching, Fixed Wireless Broadband and Industrial IoT products. With zero-touch provisioning, service providers can create, provision and manage an entire network from a single dashboard. cnMaestro is flexible, allowing the choice for public cloud, private cloud or on-premises deployment. Enterprise, Managed Service Provider (MSP) and Access & Backhaul can use tailored views on the platform.



## cnPilot r195P Wi-Fi Router

#### **Access Point Specifications**

FCC Ch 1-11, 36-48, 149-165

**ISED** Ch 1–11, 36–48, 149–165

ETSI Ch 1-13, 32-48

**ROW** Ch 1–14, 36–48, 149–165 Individual country limits may apply

(2401-2473 MHz, 5170-5250 MHz, 5735-5835 MHz)

2.4 GHz: 300 Mbps Max PHY Rate **5 GHz:** 867 Mbps

**Ports** Five x IEEE 100/100/1000 Mbps Ethernet

> Auto Sensing USB 2.0

Voice Yes, 2 ATA ports via RJ11

**Power** 12VDC, 3A, power out on WAN port,

30VDC

2.1 mm x 5.5 mm CP, DC barrel connector

Localized power supply included

2.4 GHz: 5 dBi **Antenna** 

**5 GHz:** 5 dBi

Omni

(22 dBm conducted Tx Pwr)

**5 GHz:** 20 dBm

(15 dBm conducted Tx Pwr)

200 mm x 140 mm x 50 mm **Dimensions** 

 $(7.87 \text{ in } \times 5.51 \text{ in } \times 1.97 \text{ in})$ 

Weight 900 g (1.98 lbs)

**LEDs** Power, WLAN, Port status LEDs

0°C to 40°C **Ambient Operating Temperature** (32°F to 104°F)

-20°C to 70°C Storage **Temperature** (-4°F to 158°F)

Humidity 95% RH non-condensing

Certifications FCC, IC, CE, EN 60601-1-2, EN 60950-1 (Compliance)

WEEE & RoHS

## **WLAN and Network Specifications**

| WLAN                            | 64 clients, 8 SSIDs   | Subscriber QoS | WMM, DSCP, 802.1p   |
|---------------------------------|---|----------------|---|
| Management<br>Features          | Firmware Upgrade, Web Management<br>Interface, Local and Remote Syslog<br>(RFC3164), Auto Provisioning, Time<br>Synchronization, Multi User Level | Network        | NAT router or Bridge mode, DDNS,<br>MAC address cloning, wired speed NAT<br>Router, DHCP Server and Client, IP conflict<br>detection, Port forwarding |
| Management<br>Protocols         | TR-069, TR-098, TR-0104, TR-0106,<br>TR-0143<br>cnMaestro Cloud or on-premises VM,<br>SNTP, SNMPv2, Telnet  | Security       | DMZ, Rate Limiting, Passthrough, Firewall<br>(SYN Flooding, IP Spoofing, Smurf Attack,<br>Ping of Death, DoS)   |
| Authentication<br>SSID Security | WEP, WPA-PSK (TKIP), WPA2-PSK (TKIP),<br>WPA2-PSK (AES), Open, Mixed mode   |                |   |



## cnPilot r195P Series Wi-Fi Router

**Standards** 

Wi-Fi Protocols VHT MCS rates, 16/64/256-QAM, 20/40/80 MHz

AMSDU, AMPDU, RIFS, STBC, LDPC, MIMO Power Save, MRC, BPSK, QPSK, CCK, DSSS, OFDM,

IEEE 802.11 a/ac/b/d/e/g/h/i/n

Other Network Protocols

 $\hbox{DHCP/PPPoE, HTTP Server for Web Management, TFTP/HTTP for Auto Provisioning, DHCP Option Codes for SIP}\\$ 

(RFC3361), DNS/DNS SRV (RFC1706 and RFC 2782), IEEE802.1Q VLAN, 802.1P, DSCP, IGMPv2 snooping,

PPTP/L2TP VPN

## r195P Telephony Specifications

**IP Signaling** SIP V2 (RFC3261/3262/3263/3264)

**Voice CODEC** G.711 (A-law, μ-law), G.722,G.723, G.729

FAX over IP Real Time FAX over IP via T.38

T.30 Fax with G.711

**Voice Features** Adaptive jitter buffer management

Voice activity detection Comfort noise generation Echo cancellation

Interactive voice response

**Call Features** 3-way conference

Call hold, call forwarding, call transfer, call waiting

Speed dial, Hotline, Dial plan Caller ID, Black list, Call log

## **Ordering Information**

| PL-R195PUSA-US | r195P US type A P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out       |  |
|----------------|---|--|
| PL-R195PEUA-EU | r195P EU type C P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out       |  |
| PL-R195PNPA-RW | r195P No line cord, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out        |  |
| PL-R195PUKA-EU | r195P UK type G P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out       |  |
| PL-R195PINA-RW | r195P India type D P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out    |  |
| PL-R195PANA-RW | r195P AUS/NZ type I P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out   |  |
| PL-R195PARA-RW | r195P Argentina type I P/S 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out |  |

#### ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.

#### cambiumnetworks.com