

# cnPilot™ r195 Series 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 r195 series 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 r195 series 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 30 V 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 r195 into the wireless fabric. Through cnMaestro web-first interface the r195 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 r195 Series 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** (Individual country limits may apply)

Ch 1–14, 36–48, 149–165

**Max PHY** 2.4 GHz: 300 Mbps

**Rate** 5 GHz: 867 Mbps

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

Auto Sensing

r195P: USB 2.0

**Voice** r195W: no

r195P: yes, 2 ATA ports via RJ11

**Power** r195W: 12VDC, 1 A

r195P: 12VDC, 3A, power out on WAN port,  
30VDC

2.1 mm x 5.5 mm CP, DC barrel connector

Localized power supply included

**Antenna** 2.4 GHz: 5 dBi

5 GHz: 5 dBi

Omni

**Max EIRP** 2.4 GHz: 27 dBm

5 GHz: 20 dBm

**Dimensions** r195W:

190 mm x 135 mm x 40 mm  
(7.48 in x 5.31 in x 1.57 in)

r195P:

200 mm x 140 mm x 50 mm  
(7.87 in x 5.51 in x 1.97 in)

**Weight** 900 g (1.98 lbs)

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

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

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

**Humidity** 95% RH non-condensing

**Certifications (Compliance)** FCC, IC, CE, EN 60601-1-2, EN 60950-1  
WEEE & RoHS

### WLAN and Network Specifications

**WLAN** 64 clients, 8 SSIDs

**Management Features** Firmware Upgrade, Web Management Interface, Local and Remote Syslog (RFC3164), Auto Provisioning, Time Synchronization, Multi User Level

**Management Protocols** TR-069, TR-098, TR-0104, TR-0106, TR-0143  
cnMaestro Cloud or on-premises VM, SNTP, SNMPv2, Telnet

**Authentication SSID Security** WEP, WPA-PSK (TKIP), WPA2-PSK (TKIP), WPA2-PSK (AES), Open, Mixed mode

**Subscriber QoS** WMM, DSCP, 802.1p

**Network** NAT router or Bridge mode, DDNS, MAC address cloning, wired speed NAT Router, DHCP Server and Client, IP conflict detection, Port forwarding

**Security** DMZ, Rate Limiting, Passthrough, Firewall (SYN Flooding, IP Spoofing, Smurf Attack, Ping of Death, DoS)

## cnPilot r195 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** 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,  $\mu$ -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



r195W



r195P

## cnPilot r195 Series Wi-Fi Router

### Ordering Information

<b>PL-R195WUSA-US</b>	r195W US type A P/S, 802.11n/AC Dual Band 2x2 WLAN access point
<b>PL-R195WEUA-EU</b>	r195W EU type C P/S, 802.11n/AC Dual Band 2x2 WLAN access point
<b>PL-R195WNPA-RW</b>	r195W No line cord, 802.11n/AC Dual Band 2x2 WLAN access point
<b>PL-R195WUKA-EU</b>	r195W UK type G P/S, 802.11n/AC Dual Band 2x2 WLAN access point
<b>PL-R195WINA-RW</b>	r195W India type D P/S, 802.11n/AC Dual Band 2x2 WLAN access point
<b>PL-R195WANA-RW</b>	r195W AUS/NZ type I P/S, 802.11n/AC Dual Band 2x2 WLAN access point
<b>PL-R195WARA-RW</b>	r195W Argentina type I P/S 802.11n/AC Dual Band 2x2 WLAN access point
<b>PL-R195PUSA-US</b>	r195P US type A P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out
<b>PL-R195PEUA-EU</b>	r195P EU type C P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out
<b>PL-R195PNPA-RW</b>	r195P No line cord, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out
<b>PL-R195PUKA-EU</b>	r195P UK type G P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out
<b>PL-R195PINA-RW</b>	r195P India type D P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out
<b>PL-R195PANA-RW</b>	r195P AUS/NZ type I P/S, 802.11n/AC Dual Band 2x2 WLAN access point, ATA, 30V power out
<b>PL-R195PARA-RW</b>	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.