

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 30 V power out, ATA ports**



EXTEND BROADBAND WIRELESS FOR RESIDENTIAL WLAN

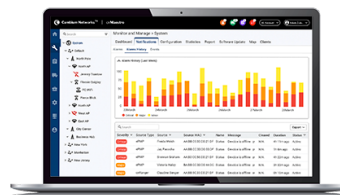
The r195 series provides robust Wi-Fi performance to match and exceed the expectations of the modern family anywhere on the globe. As social media, streaming media, work-from-home and school-from-home increase, the need for high-performance Wi-Fi is here today. Don't be trapped by old 802.11n technology.

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.

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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 Rate 2.4 GHz: 300 Mbps
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: 12 VDC, 1 A
r195P: 12 VDC, 3 A, power out on WAN port,
30 VDC
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, SNMP, 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)

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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, 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



r195W



r195P

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Ordering Information

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