



# cnPilot R190V for ISPs

## Cloud managed Home Router with ATA

The IPV6 capable R190V is ideal for cost-conscious service providers seeking a standard, entry level home router with cutting edge cloud management and robust features. The R190V can be remotely configured, monitored, and upgraded, and offers in-home client insights that make troubleshooting a breeze – all reducing the ISP’s need for site visits.



cnPilot R190V

### MAKING THE CASE - RETURN ON INVESTMENT (ROI)

It’s estimated that over 60% of customer complaint calls to service providers (SPs) for “poor internet service” result from unmanaged home routers, purchased and deployed by end customers themselves.

Service providers lose money servicing these complaints with no visibility to the indoor home router, with no improvement in customer satisfaction, high subscriber churn, or ability to recover lost revenue opportunities. The R190V gives service providers more options than ever, enabling them to:

- Enhance customer satisfaction by offering standardized SP- validated and managed indoor home routers that connect users to the internet rapidly and efficiently.
- Sell or lease the R190V as the ISP provided and managed home router. The ATA port enables ISPs to provide Voice-over-IP phone service, creating a new line of revenue for the ISPs
- Reduce service call costs with client visibility via cnMaestro with the ezView tool. Track and manage customer inventory, and see attached clients and RSSI information remotely – enabling fast customer support.

### REMOTE CLOUD OR ON-PREMISES MANAGED

The cnPilot R190V solution can be deployed with Cambium’s cnMaestro cloud controller or On-premises controller versions, offering:

- Zero touch onboarding
- Inventory tracking and monitoring
- Dashboard views with alarms
- Remote mass upgrade
- TR-069 & SNMP management

### ezVIEW: TROUBLESHOOTING

With ezView, cnMaestro offers rich client and device troubleshooting capabilities integrated with ongoing management. When backhauled wirelessly, ezView’s single-pane-of-glass display shows data from clients, the Wi-Fi router (R190V), and the ePMP or PMP 450 wireless links backhauling the router.

### IPV4 & IPV6 – FOR TODAY AND TOMORROW

The R190V supports modern IPV6 network topology

### LICENSE-FREE ROUTER. ONE LOW PRICE.

## SPECIFICATIONS

<b>VoIP SoC</b>	<ul style="list-style-type: none"> <li>MIPS Single-core 580MHz</li> </ul>	
<b>Flash</b>	<ul style="list-style-type: none"> <li>16MBytes Flash</li> </ul>	
<b>RAM</b>	<ul style="list-style-type: none"> <li>64MBytes DDR3 RAM</li> </ul>	
<b>CPU</b>	<ul style="list-style-type: none"> <li>MT7628</li> </ul>	
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>AC/DC Adapter</li> <li>AC Input: 100-240V, 50-60Hz</li> <li>DC Output: 12V, 1.0A</li> </ul>	
<b>I/O Interfaces</b>	<ul style="list-style-type: none"> <li>1 RJ-45 for WAN port (Ethernet 100 Base-T)</li> <li>3 RJ-45 for LAN port (Ethernet 100 Base-T)</li> <li>2 RJ-11 for FXS port</li> <li>IEEE802.11 b/g/n</li> </ul>	
<b>Environmental</b>	<ul style="list-style-type: none"> <li>Operation Temperature: -5-45 Degree C</li> <li>Storage Temperature: -25- 85 Degree C</li> <li>Relative Humidity: 10%-90% No Condensing</li> </ul>	
<b>Key Feature</b>	<ul style="list-style-type: none"> <li>100Mbps NAT/NAPT speed</li> <li>2T2R 2.4G 802.11 b/g/n(300 Mbps)</li> <li>Support VoIP FXS port with SIP and T.38 FAX</li> </ul>	
<b>Audio Codec</b>	<ul style="list-style-type: none"> <li>G.711 (A-Law, u-Law) with PESQ above 4.3</li> <li>G.729 with PESQ above 3.7</li> <li>Adaptive Jitter Buffer Management</li> <li>Voice Activity Detection</li> <li>Comfort Noise Generation</li> <li>Echo Cancellation</li> <li>T.30 FAX with G.711</li> <li>Real time FAX over IP via T.38</li> </ul>	
<b>Wireless</b>	<ul style="list-style-type: none"> <li>802.11 b/g/n support</li> <li>4 SSID</li> <li>Static WEP(64/128bit)</li> <li>Dynamic WEP(64/128bit)</li> <li>AES(CCMP/TKIP)</li> <li>MAC certification</li> <li>WEP certification</li> <li>WPA-PAK/WPA-PSK(2.0)</li> <li>WPA/WPA2</li> <li>AP Isolation and MBSSID AP Isolation</li> <li>WMM</li> <li>WDS</li> <li>WPS</li> <li>Station list</li> <li>Wireless MAC Filter</li> </ul>	
		<ul style="list-style-type: none"> <li>NAT mode and Bridge mode</li> <li>Support DDNS</li> <li>MAC address cloning</li> <li>SIP proxy redundancy</li> <li>NAT Traversal by STUN</li> <li>Built-in Wired speed NAT Router</li> <li>DHCP Server and Client</li> <li>IP conflict detection</li> <li>Port Forwarding, DMZ, SuperDMZ</li> <li>802.1Q VLAN/802.1p, DSCP, Rate Limiting</li> <li>VPN(PPTP,L2TP, IPSec) Passthrough</li> <li>SNTP</li> <li>IGMPv2</li> <li>Firewall(SYN Flooding, IP Spoofing, Smurf Attack, Ping of Death, DoS)</li> </ul>
		<ul style="list-style-type: none"> <li>Firmware Upgrade</li> <li>Web Management Interface</li> <li>IVR-driven Management Interface</li> <li>Local and Remote Syslog (RFC3164)</li> <li>Auto Provisioning</li> <li>SNTP Time Synchronization</li> <li>Multi User Level</li> <li>SNMP v2</li> <li>Telnet</li> <li>TRO69</li> <li>System Log: local log and remote log</li> </ul>
		<ul style="list-style-type: none"> <li>3-way conference</li> <li>Call hold</li> <li>Call forwarding</li> <li>Call Transfer</li> <li>Call waiting</li> <li>Caller ID and CWCID</li> <li>DTMF Relay: In-band, Out-band and SIP INFO</li> <li>QoS Layer 3</li> <li>Call Log</li> <li>CID/CWCID</li> <li>Dial Plan</li> <li>DTMF Mode: Inband, outband and SIP Info</li> </ul>