

**802.11AX WiFi6 3000M Wireless Router**

Model: WR3011GP



## Description:

WR3011GP is an enterprise-grade WiFi 6 router supporting 802.11ax on 2.4GHz and 5.8GHz bands. It provides simultaneous high-speed access for up to 128 users, with full Gigabit interfaces. Wireless speeds reach 573.5Mbps (2.4G) and 2474Mbps (5.8G), delivering a total rate of 3047.5Mbps. The router features high gain, strong sensitivity, wide coverage, low latency, and stable transmission. It supports MESH networking and relay functions for easy wireless expansion, making it suitable for homes, stores, restaurants, and enterprises.

## Main Features:

- Carrier-grade design – Meets telecom EMI, surge, and lightning protection standards (6KV common-mode, 1.5KV differential-mode) with enhanced heat dissipation for stable operation.
- High-speed WiFi 6 – Dual-band 802.11ax, 573.5Mbps (2.4GHz) + 2474Mbps (5GHz), total 3047.5Mbps.
- Professional RF chipset – Stronger coverage, higher speed, and longer transmission distance.
- Hardware acceleration – HNAT fast forwarding, WAN throughput up to 2Gbps.
- WiFi 6 technologies – MU-MIMO, OFDMA, BSS Coloring for high capacity, low latency, and stable performance in dense networks.
- High user capacity – 160MHz 5GHz bandwidth, supports up to 128 concurrent users.
- Rich network functions – Routing/bridge, IPv4/IPv6, IPTV, relay, MESH, DDNS, VPN, port mapping, DMZ, traffic control.
- Strong security – WPA/WPA2/WPA3, WPS, SSID hiding, guest network, MAC/IP/URL filtering, anti-DDoS.
- Easy setup – Quick setup wizard, no professional knowledge required.
- Continuous updates – Regular firmware upgrades ensure long-term performance and adaptability.
- The built-in 8dBi directional antenna can meet wireless transmission within 1KM and can realize point-to-point and point-to-multipoint outdoor coverage and applications.
- Supports intelligent channel analysis and automatic optimal channel selection, with a maximum rate of 300Mbps.
- The product supports universal relay mode and AP mode, and the user application scenarios are more extensive.
- Supports both PoE power supply and DC 12V power supply.
- Support one-click pairing.

## Hardware Specification:

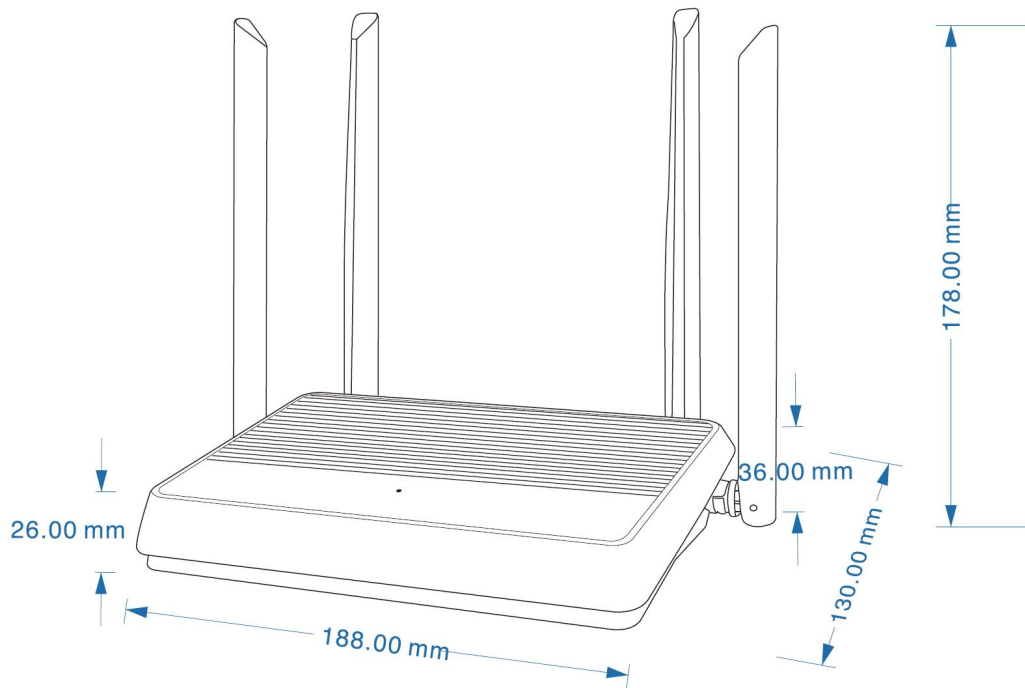
Hardware configuration	
<b>Model</b>	<b>WR3011GP</b>
Main Chip	IPQ5000+QCN6102+QCA8337
Frequency	Dual-core ARM® Cortex-A53 1GHz
Memory	256MB
Flash	128MB
Wireless Technology	<ul style="list-style-type: none"> <li>- 2.4G WiFi 2*2 802.11b/g/n/ax(theoretical maximum speed up to 573.5Mbps)</li> <li>- 5.8G WiFi 2*2 802.11a/n/ac/ax(theoretical maximum speed up to 2474Mbps)</li> <li>- Dynamic bandwidth switching, beamforming</li> <li>- 1024QAM ultra high-speed access rate, OFDMA ultra high-density user access</li> <li>- MU-OFDMA 2G upload 4 users/download 4 users, 5G upload 4 users/download 8 users</li> <li>- MU-MIMO 2G/5G upload /download 2 users</li> <li>- BSS Color, OBSS-PD, SRG, and SRP spatial reuse</li> <li>- Space-Time Block Coding (STBC), Low-Density Parity Check (LDPC), uplink/downlink beamforming (Beamformer TX/RX)</li> <li>- Energy saving: single antenna standby technology, dynamic MIMO power saving technology, enhanced automatic power saving transmission technology, per packet power control technology, and so on.</li> </ul>
Device Interfaces	<ul style="list-style-type: none"> <li>- WAN*1/LAN*3 10/100/1000Mbps adaptive</li> <li>- DC power interface compatible with power plug with outer diameter of 5.5mm, inner diameter of 2.1mm, and length above 9.5mm</li> </ul>
Buttons	<ul style="list-style-type: none"> <li>- Reset button for factory reset (long press for 6 seconds to reset)</li> <li>- WPS button for easy password-free connection</li> </ul>
Indicators	Status indicators
Antennas	<ul style="list-style-type: none"> <li>- External 2.4G 5dBi rubber rod antennas * 2</li> <li>- External 5G 5dBi rubber rod antennas * 2</li> </ul>
Power	DC 12V/1A, positive outer and negative inner
Operating/Storage Temperature	-10℃~45℃/-20℃~70℃
Operating/Storage Humidity	10% to 90% (non-condensing) / 5% to 90% (non-condensing)
Dimensions	188.0*130.0*26.0(thinnest, last 36.0) mm (excluding antennas)
Weight	N/A

## Wifi Specification

WiFi Spec	
Frequency Range	2.4G: 2.4~2.4835GHz 5G: UNII-1: 5.15~5.35GHz UNII-2: 5.47~5.725GHz UNII-3: 5.725~5.825GHz
Channel	2.4G: 1、2、3、4、5、6、7、8、9、10、11、12、13 5G: 36、40、44、48、52、60、64、149、153、157、161、165
Modulation	802.11b: DSSS (DQPSK, DBPSK, CCK) 802.11g: OFDM (BPSK, QPSK, 16-QAM) 802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11ac: OFDM (BPSK, QPSK, 64-QAM, 256-QAM) 802.11ax: OFDMA (BPSK, 256-QAM, 1024-QAM)
Transmission Rate	11b up 11Mbps, 11g up 54Mbps, 11n up 300Mbps 11ac up 864.7Mbps, 11ax 2.4G up 573.5Mbps, 11ax 5G up 2474Mbps
Receiver Sensitivity	2.4G: 11g: $<-95\pm 1.5\text{dBm}@6\text{Mbps}$ , $<-77\pm 1.5\text{dBm}@54\text{Mbps}$ 11n 40MHz: $<-96\pm 1.5\text{dBm}@MCS0$ , $<-65\pm 1.5\text{dBm}@MCS7$ 11ax 40MHz: $<-96\pm 1.5\text{dBm}@MCS0$ , $<-65\pm 1.5\text{dBm}@MCS11$ 5G: 11a: $<-94\pm 1.5\text{dBm}@6\text{Mbps}$ , $<-77\pm 1.5\text{dBm}@54\text{Mbps}$ 11ac 80MHz: $<-88\pm 1.5\text{dBm}@MCS0$ , $<-64\pm 1.5\text{dBm}@MCS9$ 11ac 160MHz: $<-85\pm 1.5\text{dBm}@MCS0$ , $<-60\pm 1.5\text{dBm}@MCS9$ 11ax 80MHz: $<-88\pm 1.5\text{dBm}@MCS0$ , $<-57\pm 1.5\text{dBm}@MCS11$ 11ax 160MHz: $<-85\pm 1.5\text{dBm}@MCS0$ , $<-54\pm 1.5\text{dBm}@MCS11$
Transmit Power	11b: $22\text{dBm}\pm 1.5\text{dBm}@11\text{Mbps}$ 11g: $21\text{dBm}\pm 1.5\text{dBm}@54\text{Mbps}$ 11n(20/40MHz): $19\text{dBm}\pm 1.5\text{dBm}@MCS7$ 11ac(40/80/160MHz): $17\text{dBm}\pm 1.5\text{dBm}@MCS9$ 11ax(20/40M) : $17\text{dBm}\pm 1.5\text{dBm}@MCS11$ 11ax(80/160M) : $17\text{dBm}\pm 1.5\text{dBm}@MCS11$

Software Functions	
Working Mode	Routing mode/Bridge mode
Number of connected users	128 Peoples
Management mode	English web remote management/support for TR069 remote management
Status	Internet\Router\WiFi\Primary Network User\ Guest User\DHCP List
Network	Ethernet: Network (Routing\Bridge) \ Ethernet Setting (Dynamic IP\Static IP\PPPoE)\ Ethernet Status LAN Setup: Lan: IP Address\Subnet Mask\DHCP setting\DNS\ Lease time Guest Network Address Pool
Wireless	-WiFi: Dual frequency in one\2.4G&5G WPS switch\ 2.4G&5G: Status switch\Hide SSID\SSID\Security\ Encryption Mode>Password\ Advanced Settings: Protocol\Channel Bandwidth\ Channel\Tx power -Black and White List: Switch\ Mode switch (Blacklist\Whitelist) \Blacklist -WPS: 2.4G&5G Switch\PBC -Mesh: Switch\Role (Automatic>Main route\Satellite) \ Add satellite\Fast roaming\ 2.4G&5G Set signal strength threshold -Relay mode: Switch\Frequency band\SSID(Scan)\ Security>Password>Status -Advanced Configuration: Band Streering\WLAN QOS\ WiFi5 Compatibility mode\WiFi timed reboot
Network Advanced	IPV6\DDNS\IPTV\Guest Network\Parental Control\ VPN Client(PPTP\L2TP)\Hardware HNAT
Features	ALG\Port Forwarding\DMZ Settings\MAC Filtering\ IP Filtering\DDOS\URL Control
Management	SNTP\Change User Info\Backup & Upgrade\ Restart & Reset\LED Switch\Flow Control\System Log
Setup Wizard	WiFi-Network Configuration-Summary
Mesh Topo	Overall network device topology(IP\MAC\Medium)

## Dimension:



## Packaging information

WR3011GP\*1

DC 12V/1A power adapter\*1

user manual\*1

