Model: WR3000 2.0

# AX3000 Gigabit Mesh Wi-Fi 6 Router




Datasheet

# Highlights

A WiFi 6 router with four Gigabit ports, suitable for home internet up to 1000 Mbps, connecting many devices, and reducing latency.

- 1.2 GHz Dual-Core CPU
- 4-Stream Dual-Band Wi-Fi 6
- 2402 Mbps + 574 Mbps Wi-Fi
- 4× Gigabit Ethernet Ports
- Covers 130 m² (1,400 ft²)
- Cudy Mesh, VPN Server and Client
- Cudy App, Cloud Control

Actual wireless data throughput will vary as a result of network conditions, client limitations, and environmental factors including building layout, obstacles, and client location.

The wireless coverage claim serves as a reference only. Coverage performance will vary due to environmental factors including building layout, obstacles, traffic volume and density, and device location. For optimal coverage, please place the device in a central location within the area requiring Wi-Fi.

# Package Content

- WR3000
- Power Adapter
- Ethernet Cable
- Installation Guide

# Hardware Specs

| | | |
|---|---|---|
| **Model Version** | WR3000 2.0 | |
| **CPU** | CPU Details | 1.2 GHz Dual-Core |
| **Memory/Storage** | Flash/ROM | 128 MB (1 Gbit) NAND |
| | DDR/RAM | 128 MB (1 Gbit) DDR3 |
| **Wireless** | 5 GHz Wi-Fi Speed | 2402Mbps |
| | 2.4 GHz Wi-Fi Speed | 574 Mbps |
| | 5 GHz Wi-Fi Streams | 2 Spatial Streams |
| | 2.4 GHz Wi-Fi Streams | 2 Spatial Streams |
| | Wi-Fi Antennas | 4× Fixed |
| | FEM or PA/LNA | 5 GHz: 2× Internal, 2.4 GHz: 2× Internal |
| | Beamforming | True |

| | | |
|---|---|---|
| **Wireless** | Range Performance | Max: 200 m (656 ft)<br>Tested in open-space environments with minimal interference. Actual WiFi range may vary depending on layout and wall materials. Refer to the Wall Performance specifications for placement suggestions. |
| | Wall Performance | Two wooden walls with thickness < 10 cm (4")<br>One concrete wall with thickness < 20 cm (7") or two concrete walls with thickness < 10 cm (4") |
| **Interfaces** | Gigabit RJ45 Ports | 4 |
| | Ethernet Notes | 1× WAN port, the rest are LAN ports |
| **Buttons and LEDs** | LED | System, Internet, WAN, LAN, 2.4 GHz Wi-Fi, 5 GHz Wi-Fi |
| | Physical Buttons | WPS Button, Reset Button |

# Hardware Specs

| | | |
|---|---|---|
| **Power** | Power Input Type | DC Jack |
| | Power Methods | DC |
| | Power Input | 12V⎓1A |
| | Max Power Consumption (W) | 8.8w |
| | Idle Power Consumption (W) | 2.5w |
| | Power Adapter In the Box | Input: 100-240V~, 50/60Hz<br>Output: 12V⎓1A |
| **Reliability** | Environment | • Operating Temperature: 0 ℃ ~ 40 ℃ (32 ℉ ~104 ℉)<br>• Storage Temperature: -40 ℃ ~ 70 ℃ (-40 ℉ ~ 158 ℉)<br>• Humidity: 10% ~ 90% non-condensing<br>• Storage Humidity: 5% ~ 95% non-condensing |
| **Certifications** | FCC, CE | |
| **Mechanical** | Installation | • Desktop<br>• Wall-mount |

| | | |
|---|---|---|
| **Mechanical** | Dimension | Main Part:<br>183.3×109×35 mm<br>7.22×4.29×1.38 inches |
| | Product Weight | 252.5 g (8.91 oz.) |
| **Package Content** | • WR3000<br>• Power Adapter<br>• Ethernet Cable<br>• Installation Guide | |
| **Ordering Information** | Retail Package Weight | EU: 579.0 g (20.42 oz.) |
| | Retail Package Dimension | 240×230×60 mm<br>9.45×9.06×2.36 inches |
| | Units per Carton | 20 |
| | Carton Dimension | 49.5×32.5×48 cm<br>19.49×12.8×18.9 inches |
| | Carton Gross Weight | EU: 12.5 kg (27.56 lbs) |
| | Carton Net Weight | EU: 11.6 kg (25.57 lbs) |

# Software Specs

| | | |
|---|---|---|
| **Model Version** | WR3000 2.0 | |
| **Wireless** | Wi-Fi Standards | Wi-Fi 6 |
| | Max Wi-Fi Modulation | 1024-QAM |
| | Wi-Fi Efficiency | • OFDMA<br>• MU-MIMO<br>• BSS Color |
| | Max Capacity | 128 |
| | Recommended Client Upper Limit | 70 |
| | Wi-Fi Channel Width | Auto/20/40/80/160 MHz |
| | Wi-Fi Security | WPA/WPA2/WPA3 |
| | Guest Network | 2.4 GHz, 5 GHz |
| | Separate Client | True |
| | WPS | True |

| | | |
|---|---|---|
| **General** | Operation Modes | • Wi-Fi Router<br>• Access Point<br>• Range Extender<br>• WISP<br>• Client |
| | Mesh | Cudy Mesh |
| | Mesh Backhaul | • Wireless Backhaul<br>• Wired Backhaul |
| | Multi-Band Backhaul | True |
| | WAN Mode | • DHCP<br>• Static IP<br>• PPPOE<br>• PPTP<br>• L2TP |
| **Network** | QoS | • Per-User Rate Limiting<br>• Guest Network Rate LImiting |
| | DHCP | • Address Reservation<br>• DHCP Client List<br>• Server |
| | IP Versions | IPv4/IPv6 |

# Software Specs

| | | |
|---|---|---|
| **Network** | IPv6 Protocols | • Relay<br>• Dynamic (SLAAC/DHCPv6)<br>• Static (Fixed IP)<br>• Passthrough<br>• 464XLAT<br>• MAP-E<br>• DS-Lite |
| | Multicast | True |
| | IPTV/VLAN | • Bridge<br>• Tag VLAN<br>• VoIP VLAN<br>• IPTV VLAN |
| | TTL Customization | • Extend<br>• Spoof<br>• Custom |
| | IGMP | • IGMP Proxy<br>• IGMP Snooping |
| | Forwarding | • Port Forwarding<br>• Port Triggering<br>• UPnP<br>• DMZ |

| | | |
|---|---|---|
| **Network** | Firewall | • SPI Firewall<br>• DoS Protection<br>• Block PING |
| | Application Layer Gateway | • IPSec Passthrough<br>• L2TP Passthrough<br>• PPTP Passthrough<br>• FTP Passthrough<br>• TFTP Passthrough<br>• H323 Passthrough<br>• SIP Passthrough<br>• RTSP Passthrough |
| **Utilities** | VPN Server | • WireGuard<br>• OpenVPN<br>• PPTP<br>• L2TP<br>• IPsec |
| | VPN Client | • WireGuard<br>• OpenVPN<br>• PPTP<br>• L2TP<br>• IPsec |

# Software Specs

| | | |
|---|---|---|
| **Utilities** | DNS Options | • DNS over TLS<br>• Manual DNS<br>• Rebind Protection<br>• Override Clients' DNS |
| | DNS over TLS Providers | • Cloudflare<br>• Google<br>• Quad9<br>• Custom |
| | Captive Portal | True |
| | Wake on LAN | True |
| | Online Detection | True |
| **Management** | Parental Controls | • Profiles Settings<br>• Offline Time<br>• Online Time<br>• Pause the Internet<br>• Web Filter |
| | All Devices Management | • Wi-Fi Time Schedule<br>• MAC Filter<br>• IP/MAC Binding |

| | | |
|---|---|---|
| **Management** | Per-Devices Management | • Internet On/Off<br>• VPN On/Off<br>• Online Time Schedule<br>• Device Rename |
| | Content Management | • Domain Filtering<br>• IP Filtering |
| **System** | Local Control Method | • Config Web Page<br>• App Control |
| | Remote Control Method | • Config Page via HTTPS<br>• App Control<br>• TR069/TR098/TR111/TR143/TR181/TR369 |
| | Firmware Upgrade | • Local Update<br>• App (Over the Air)<br>• Online Update |
| | Reliability | • Timed Reboot<br>• Backup and Restore |
| | Diagnostic Tools | • Diagnosis<br>• Ping<br>• Traceroute<br>• NSLookup<br>• System Log |

# Software Specs

| | | |
|---|---|---|
| **System** | Languages | • English<br>• Bengali<br>• Catalan<br>• Czech<br>• German<br>• Greek<br>• Spanish<br>• French<br>• Hebrew<br>• Croatian<br>• Hungarian<br>• Italian<br>• Japanese<br>• Khmer<br>• Korean<br>• Dutch<br>• Norwegian<br>• Polish<br>• Portuguese<br>• Romanian<br>• Russian<br>• Slovak<br>• Swedish<br>• Thai<br>• Turkish<br>• Ukrainian<br>• Vietnamese<br>• Simplified Chinese<br>• Traditional Chinese |

| | | |
|---|---|---|
| **Dashboard** | Panel | • Internet Status<br>• Mesh Status<br>• Devices Management<br>• WAN Status<br>• LAN Status<br>• WISP Status<br>• Wi-Fi Status<br>• VPN Status<br>• DHCP Server Status<br>• System Version |
| | Charts | • Mesh Topology<br>• Internet Speed<br>• WISP Speed<br>• Wi-Fi Speed |