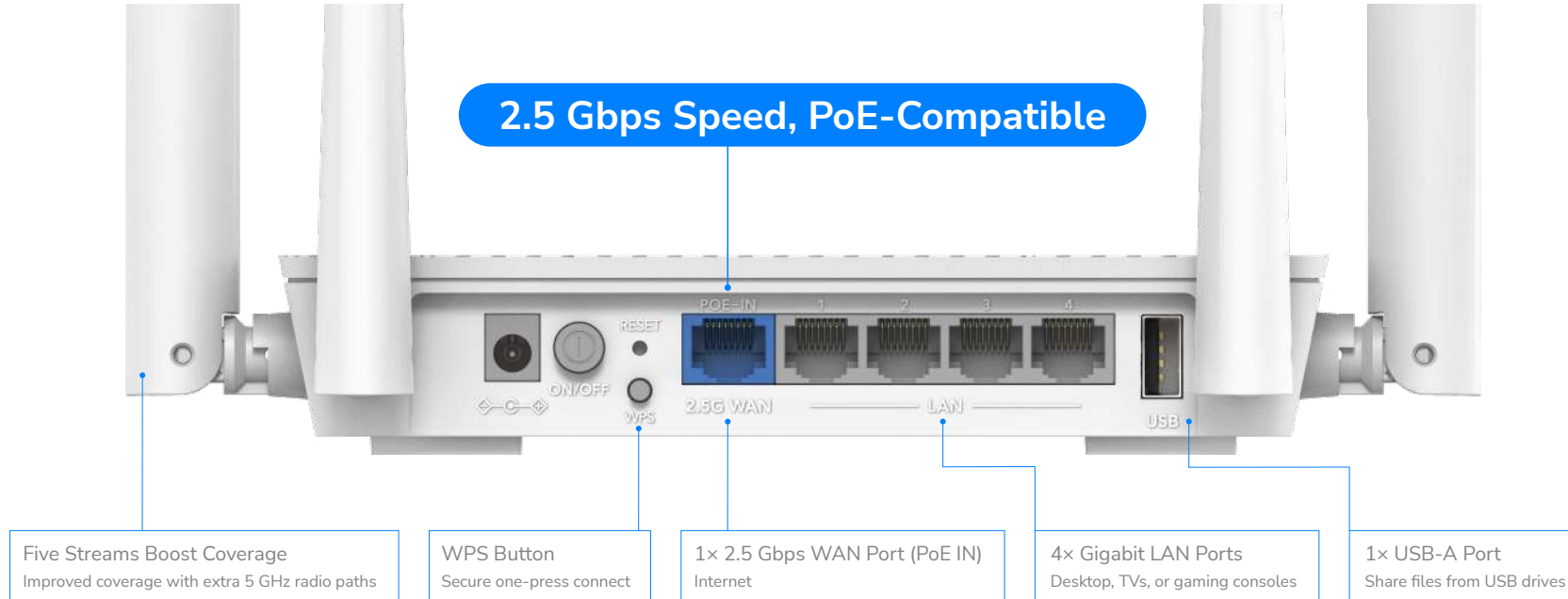




Model: WR3000P

# AX3000 2.5G Mesh Wi-Fi 6 PoE Router





## Super-Fast Wi-Fi Speed

Enjoy instant file downloads and responsive video playback with the top-notch 160 MHz bandwidth—the widest bandwidth in Wi-Fi 6 unleashes the full speed of the multi-Gig internet and mainstream client devices.

**2402 Mbps 5 GHz**



**574 Mbps 2.4 GHz**



## 512 MB.High-Density Wi-Fi Capacity

512 MB RAM and the upgraded Wi-Fi 6 standard, featuring downlink and uplink MU-MIMO and OFDMA, enables faster data transmission to multiple devices, reducing latency and boosting capacity for smoother video calls and more immersive online gaming.



Advanced whole home Wi-Fi mesh system, seamlessly connects your entire home with reliable Wi-Fi.

## Incredible Processing Power

Equipped with high-efficiency features and large RAM, the powerful chipset process data for hundreds of devices and keeps the system stable.

• 1.3 GHz Dual-Core

• ARM® Cortex-A53



## Highlights

A PoE-powered WiFi 6 router with 2.5 Gbps internet connectivity, ideal for connecting a large number of devices and reducing latency. It features a USB ports, enabling fire sharing or third-party device powering.

- 1.3 GHz Dual-Core CPU
- 512 MB RAM
- 4-Stream Dual-Band Wi-Fi 6
- 2402 Mbps + 574 Mbps Wi-Fi
- 1× 2.5GbE and 4× GbE
- 1× USB 2.0
- 802.3at/af, Passive PoE, DC
- Covers 130 m² (1,400 ft²)
- 200 Connected Devices
- Cudy App, Cloud Control
- EasyMesh

## Package Content

- WR3000P
- Power Adapter
- Ethernet Cable
- Installation Guide

## Hardware Specs

|                   |                                                   |                                      |
|-------------------|---------------------------------------------------|--------------------------------------|
| CPU               | Chipset                                           | MT7981                               |
|                   | CPU Details                                       | 1.3 GHz Dual-Core, ARM Cortex-A53    |
| Memory/Storage    | Flash/ROM                                         | 128 MB (1 Gbit) NAND                 |
|                   | DDR/RAM                                           | 512 MB (4 Gbit) DDR4                 |
| Wireless          | 5 GHz Wi-Fi Speed                                 | 2402 Mbps                            |
|                   | 2.4 GHz Wi-Fi Speed                               | 574 Mbps                             |
|                   | 5 GHz Wi-Fi Streams                               | 2T2R (2×2 MIMO) with an Extra Stream |
|                   | 2.4 GHz Wi-Fi Streams                             | 2T2R (2×2 MIMO)                      |
|                   | Wi-Fi Antennas                                    | 4× Fixed                             |
|                   | 5 GHz Antenna Gain Max                            | 5.3dBi                               |
|                   | 2.4 GHz Antenna Gain Max                          | 5.3dBi                               |
|                   | FEM or PA/LNA                                     | 5 GHz: 3× External                   |
|                   |                                                   | 2.4 GHz: 2× External                 |
|                   | Beamforming                                       | True                                 |
| Range Performance | Max: 220 m (722 ft)                               |                                      |
|                   | Indoor WiFi range varies depending on             |                                      |
|                   | the layout and wall materials. See Wall           |                                      |
| Wall Performance  | Performance spec for placement suggestions.       |                                      |
|                   | Two wooden walls with thickness < 10 cm (4")      |                                      |
|                   | One concrete wall with thickness < 20 cm (7")     |                                      |
|                   | or two concrete walls with thickness < 10 cm (4") |                                      |



# Hardware Specs

|            |                    |                                                                                     |
|------------|--------------------|-------------------------------------------------------------------------------------|
| Interfaces | 2.5G RJ45 Ports    | 1                                                                                   |
|            | Gigabit RJ45 Ports | 4                                                                                   |
|            | Ethernet Notes     | The 2.5G port is WAN port and accepts PoE powering, the Gigabit ports are LAN ports |
|            | USB-A 2.0 Ports    | 1                                                                                   |
|            | LED                | System                                                                              |
|            |                    | Internet                                                                            |
|            |                    | 2.4 GHz Wi-Fi                                                                       |
|            |                    | 5 GHz Wi-Fi                                                                         |
|            |                    | WAN                                                                                 |
|            |                    | LAN                                                                                 |
| Power      | Physical Buttons   | USB                                                                                 |
|            |                    | Power On/Off Button                                                                 |
|            |                    | WPS Button                                                                          |
|            |                    | Reset Button                                                                        |
|            |                    | DC Jack, PoE via Ethernet Port                                                      |
|            |                    |                                                                                     |
|            | Power Methods      | DC                                                                                  |
|            |                    | 802.3at/af PoE                                                                      |
|            |                    | Passive PoE                                                                         |
|            |                    | DC 12V 1.5A                                                                         |
|            | Passive PoE        | 48~57V                                                                              |
|            |                    |                                                                                     |

|                      |                           |                                                       |
|----------------------|---------------------------|-------------------------------------------------------|
| Power                | Power Adapter             | Input: 100 ~ 240 V, 50/60 Hz AC                       |
|                      |                           | Output: 12V 1.5A DC                                   |
|                      | Max Power Consumption (W) | 9W                                                    |
| Reliability          | Environment               | Operating Temperature: 0 °C ~ 40 °C (32 °F ~104 °F)   |
|                      |                           | Storage Temperature: -40 °C ~ 70 °C (-40 °F ~ 158 °F) |
|                      |                           | Humidity: 10% ~ 90% non-condensing                    |
|                      |                           | Storage Humidity: 5% ~ 95% non-condensing             |
| Certifications       | FCC, CE                   |                                                       |
| Mechanical           | Installation              | Desktop                                               |
|                      |                           | Wall-mount                                            |
|                      | Dimension                 | 173×123.8×33 mm                                       |
|                      |                           | 6.81×4.87×1.3 inches                                  |
|                      |                           |                                                       |
| Ordering Information | Retail Package Dimension  | 304×268×54 mm                                         |
|                      |                           | 11.97×10.55×2.13 inches                               |
|                      | Units per Carton          | 20                                                    |
|                      | Carton Dimension          | 55.6×55.5×32.5 cm                                     |
|                      |                           | 21.89×21.85×12.8 inches                               |



# Software Specs

|          |                                |                   |
|----------|--------------------------------|-------------------|
| Wireless | Wi-Fi Standards                | Wi-Fi 6           |
|          | Max Wi-Fi Modulation           | 1024-QAM          |
|          | Wi-Fi Efficiency               | OFDMA             |
|          |                                | MU-MIMO           |
|          |                                | BSS Color         |
|          | Max Capacity                   | 512               |
|          | Recommended Client Upper Limit | 200               |
|          | Max Wi-Fi Channel Width        | 160 MHz           |
|          | Wi-Fi Security                 | WPA/WPA2/WPA3     |
|          | Guest Network                  | 2.4 GHz, 5 GHz    |
| General  | WPS                            | True              |
|          | Operation Modes                | Wi-Fi Router      |
|          |                                | Access Point      |
|          |                                | Range Extender    |
|          |                                | WISP              |
|          |                                | Client            |
|          | Mesh                           | Cudy Mesh         |
|          | Mesh Backhaul                  | Wireless Backhaul |
|          |                                | Wired Backhaul    |
|          | Multi-Band Backhaul            | true              |

|         |                            |                        |
|---------|----------------------------|------------------------|
| General | WAN Mode                   | DHCP                   |
|         |                            | Static IP              |
|         |                            | PPPOE                  |
|         |                            | PPTP                   |
|         |                            | L2TP                   |
|         | Internet Failover Sequence | WAN                    |
|         |                            | WISP                   |
| Network | QoS                        | Per-User Rate Limiting |
|         |                            | Address Reservation    |
|         | DHCP                       | DHCP Client List       |
|         |                            | Server                 |
|         |                            |                        |
|         | IP Versions                | IPv4/IPv6              |
|         | IPv6 Protocols             | Relay                  |
|         |                            | Dynamic (SLAAC/DHCPv6) |
|         |                            | Static (Fixed IP)      |
|         |                            | Passthrough            |
|         |                            | 464XLAT                |
|         |                            | MAP-E                  |
|         |                            | DS-Lite                |
|         | IPTV/VLAN                  | Bridge                 |
|         |                            | Tag VLAN               |
|         |                            | VoIP VLAN              |
|         |                            | IPTV VLAN              |



# Software Specs

|         |                           |                   |
|---------|---------------------------|-------------------|
| Network | TTL Customization         | Extend            |
|         |                           | Spoof             |
|         |                           | Custom            |
|         | IGMP                      | IGMP Proxy        |
|         |                           | IGMP Snooping     |
|         | Forwarding                | Port Forwarding   |
|         |                           | Port Triggering   |
|         |                           | UPnP              |
|         |                           | DMZ               |
|         | Firewall                  | SPI Firewall      |
|         |                           | DoS Protection    |
|         |                           | Block PING        |
|         | Application Layer Gateway | IPSec Passthrough |
|         |                           | L2TP Passthrough  |
|         |                           | PPTP Passthrough  |
|         |                           | FTP Passthrough   |
|         |                           | TFTP Passthrough  |
|         |                           | H323 Passthrough  |
|         |                           | SIP Passthrough   |
|         |                           | RTSP Passthrough  |

|           |                 |                                          |
|-----------|-----------------|------------------------------------------|
| Utilities | VPN Server      | WireGuard                                |
|           |                 | OpenVPN                                  |
|           |                 | IPsec                                    |
|           |                 | Zerotier                                 |
|           |                 | PPTP                                     |
|           |                 | L2TP                                     |
|           | VPN Client      | WireGuard                                |
|           |                 | OpenVPN                                  |
|           |                 | IPsec                                    |
|           |                 | Zerotier                                 |
|           |                 | PPTP                                     |
|           |                 | L2TP                                     |
|           | VPN Performance | OpenVPN Client (UL/DL): 90 / 120 Mbps    |
|           |                 | OpenVPN Server (UL/DL): 180 / 160 Mbps   |
|           |                 | WireGuard Client (UL/DL): 224 / 230 Mbps |
|           |                 | WireGuard Server (UL/DL): 360 / 314 Mbps |
|           | DNS Options     | DNS over TLS                             |
|           |                 | Manual DNS                               |
|           |                 | Rebind Protection                        |
|           |                 | Override Clients' DNS                    |



# Software Specs

|            |                        |                                           |
|------------|------------------------|-------------------------------------------|
| Utilities  | Wake on LAN            | True                                      |
|            | Wake on LAN            | True                                      |
|            | Wake on LAN            | True                                      |
| Management | All Devices Management | Wi-Fi Time Schedule                       |
|            |                        | MAC Filter                                |
|            |                        | IP/MAC Binding                            |
|            | Per-Devices Management | Internet On/Off                           |
|            |                        | VPN On/Off                                |
|            |                        | Online Time Schedule                      |
|            |                        | Device Rename                             |
|            | Content Management     | Domain Filter                             |
|            |                        | IP Filter                                 |
|            |                        |                                           |
| System     | LED Control            | ture                                      |
|            | Local Control Method   | Config Web Page                           |
|            |                        | App Control                               |
|            | Remote Control Method  | Config Page via HTTPS                     |
|            |                        | App Control                               |
|            |                        | TR069/TR098/TR111/TR181                   |
|            | Firmware Upgrade       | Local Update                              |
|            |                        | App (Over the Air)                        |
|            |                        | Online Update                             |
|            | Reliability            | Timed Reboot                              |
|            |                        | Backup and Restore                        |
|            | Diagnostic Tools       | Diagnosis                                 |
|            |                        | Ping                                      |
|            |                        | Traceroute                                |
|            |                        | NSLookup                                  |
|            |                        | System Log                                |
|            | Languages              | • English • Bengali • Catalan • Czech     |
|            |                        | • German • Greek • Spanish • French       |
|            |                        | • Hebrew • Italian • Croatian • Hungarian |
|            |                        | • Khmer • Korean • Dutch • Japanese       |
|            |                        | • Russian • Slovak • Swedish • Romanian   |

|                       |                      |                                           |
|-----------------------|----------------------|-------------------------------------------|
| System                | LED Control          | ture                                      |
|                       | Local Control Method | Config Web Page                           |
| Remote Control Method |                      | App Control                               |
|                       |                      | Config Page via HTTPS                     |
|                       |                      | App Control                               |
| Firmware Upgrade      |                      | TR069/TR098/TR111/TR181                   |
|                       |                      | Local Update                              |
|                       |                      | App (Over the Air)                        |
| Reliability           |                      | Online Update                             |
|                       |                      | Timed Reboot                              |
|                       |                      | Backup and Restore                        |
| Diagnostic Tools      |                      | Diagnosis                                 |
|                       |                      | Ping                                      |
|                       |                      | Traceroute                                |
|                       |                      | NSLookup                                  |
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|                       |                      | • Khmer • Korean • Dutch • Japanese       |
|                       |                      | • Russian • Slovak • Swedish • Romanian   |



# Software Specs

|           |           |                                            |
|-----------|-----------|--------------------------------------------|
| System    | Languages | • Turkish • Vietnamese • Thai • Ukrainian  |
|           |           | • Polish • Norwegian • Portuguese          |
|           |           | • Simplified Chinese • Traditional Chinese |
| Dashboard | Panel     | Internet Status                            |
|           |           | Mesh Status                                |
|           |           | Devices Management                         |
|           |           | WAN Status                                 |
|           |           | LAN Status                                 |
|           |           | WISP Status                                |
|           |           | Wi-Fi Status                               |
|           |           | VPN Status                                 |
|           |           | DHCP Server Status                         |
|           |           | System Version                             |
|           | Charts    | Mesh Topology                              |
|           |           | Internet Speed                             |
|           |           | WISP Speed                                 |
|           |           | Wi-Fi Speed                                |