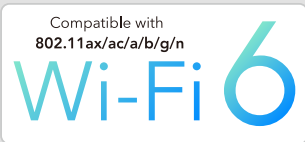




Model: P4

# 5G SA/NSA

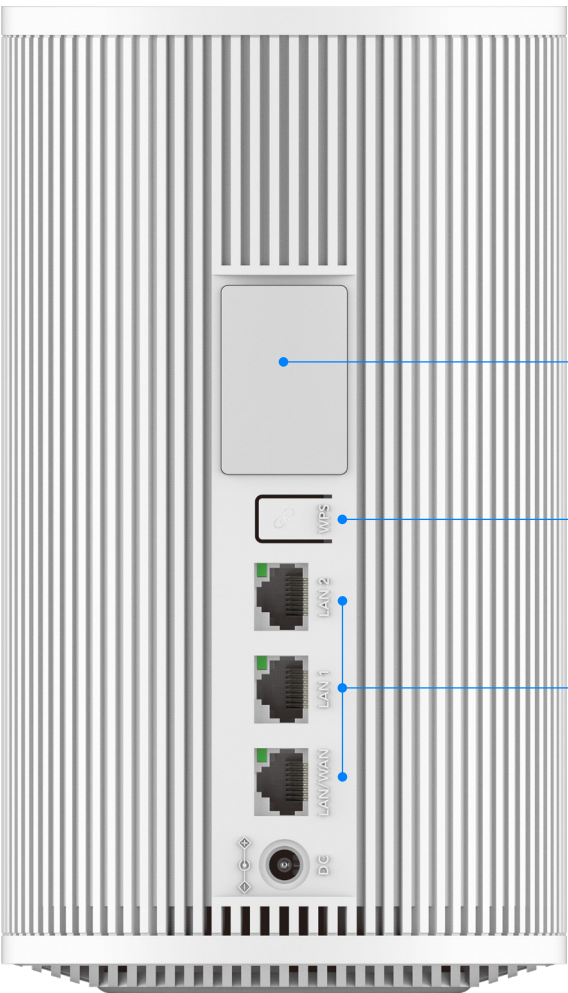
## AX3000 Wi-Fi 6 Router



Easy Setup with Cudy App



[Datasheet](#)



2× SMA Connectors  
for Extension Antennas

WPS Button

3× Gigabit Ethernet Ports

SIM Card Slot



Reset Button



# 5G. Wi-Fi 6. Top-Notch Network.

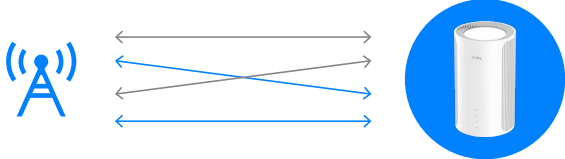
## Lightning-Fast 5G up to 3.4 Gbps Download

The Carrier Aggregation and 4×4 MIMO accelerate internet speed and reduce network latency to provide premium networks for bandwidth/latency-sensitive applications.



### Carrier Aggregation

Improves stability drastically



### 4×4 MIMO

Boosts speeds with multiple streams

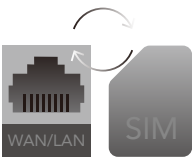
## High-Capacity Wi-Fi 6

The exceptional Wi-Fi performance enables online gaming and HD video streaming at the same time, while large files can be shared with multiple devices.

2.4 GHz 574 Mbps



5 GHz 2402 Mbps



### Always-On Internet with WAN Failover

Set the WAN/LAN port to WAN and connect to internet via broadband, then back up your network with the 5G connection to have a more reliable connection.v

### VPN for Secure Remote Access

ZeroTier/WireGuard/OpenVPN/IPSec/ L2TP/ PPTP are available for boundless VPN applications. Server and client are both supported.



## Plug in a SIM Card to Enjoy Network Everywhere





## Highlights

A 5G WiFi 6 router employing the 3GPP Release 16 standard, with a max 3.4 Gbps download speed. It features dual Qualcomm chipsets, one SIM slot, and a high-capacity AX3000 WiFi 6.

- 5G Rel. 16 with Max 3.4 Gbps DL
- UL/DL 4CA, 4×4 MIMO
- 4-Stream Dual-Band Wi-Fi 6
- 2402 Mbps + 574 Mbps Wi-Fi
- 3× Gigabit Ethernet Ports
- 1× Nano SIM Slot
- Cudy Mesh, VPN Server and Client
- Cudy App, Cloud Control

## Package Content

- P4
- Power Adapter
- Ethernet Cable
- Installation Guide

## Hardware Specs

|                     |                                        |                                                                 |
|---------------------|----------------------------------------|-----------------------------------------------------------------|
| CPU                 | Chipset                                | IPQ5018                                                         |
|                     | CPU Details                            | 1.0 GHz Dual-core, ARM Cortex-A53                               |
| Memory /Storage     | Flash/ROM                              | 128 MB (1 Gbit) NAND                                            |
|                     | DDR/RAM                                | 512 MB (4 Gbit) DDR3                                            |
| Cellular            | Cellular Standards                     | 5G Rel. 16                                                      |
|                     |                                        | DL 4G Cat. 19 / UL 4G Cat. 18                                   |
|                     | Cellular Antennas                      | 4× Internal, 2× SMA Connectors for Customized Antennas          |
|                     | Detachable Cellular Antennas Connector | SMA Female                                                      |
|                     | SIM Options                            | 1× Nano SIM Slot, eSIM (optional)                               |
|                     | Available Versions                     | EU, US                                                          |
|                     |                                        |                                                                 |
| EU Version Cellular | Suitable Region                        | Europe, Middle East, Africa, Asia-Pacific (Exc. JP, CN), Brazil |
|                     | Max DL Speed                           | 3.4 Gbps (NSA), 2.4 Gbps (SA)                                   |
|                     | Max UL Speed                           | 550 Mbps (NSA), 900 Mbps (SA)                                   |
|                     | Advanced                               | DL/UL 4CA, DL 4×4, UL 2×2 MIMO                                  |
|                     | Cellular Bands                         | 5G Sub 6 GHz:                                                   |
|                     |                                        | n1/3/5/7/8/20/28/38/40/41/71/75/76/77/78                        |
|                     |                                        | LTE-FDD: B1/3/5/7/8/20/28/32/71                                 |
|                     |                                        | LTE-TDD: B38/40/41/42/43/71                                     |
|                     |                                        | WCDMA: B1/5/8                                                   |



# Hardware Specs

|                                                                               |                                               |                                                                     |
|-------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------|
| 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)                                                     |
|                                                                               | 2.4 GHz Wi-Fi Streams                         | 2T2R (2×2 MIMO)                                                     |
|                                                                               | Wi-Fi Antennas                                | Internal                                                            |
|                                                                               | Beamforming                                   | True                                                                |
|                                                                               | FEM or PA/LNA                                 | 5 GHz: 2× External                                                  |
|                                                                               |                                               | 2.4 GHz: 2× External                                                |
|                                                                               | Range Performance                             | Max: 170 m (558 ft)                                                 |
| Indoor WiFi range varies depending on the layout and wall materials. See Wall |                                               |                                                                     |
| Performance spec for placement suggestions.                                   |                                               |                                                                     |
| Wall Performance                                                              | One wooden walls with thickness < 10 cm (4")  |                                                                     |
|                                                                               | One concrete wall with thickness < 20 cm (7") |                                                                     |
| Interfaces                                                                    | Physical Buttons                              | WPS Button                                                          |
|                                                                               |                                               | Reset Button                                                        |
|                                                                               | Gigabit RJ45 Ports                            | 3                                                                   |
|                                                                               | Ethernet Notes                                | One port supports WAN/LAN configuration, and the rest are LAN ports |

|                |                        |                                  |
|----------------|------------------------|----------------------------------|
| Interfaces     | LED                    | Power                            |
|                |                        | Internet                         |
|                |                        | Wi-Fi                            |
|                |                        | Cellular                         |
| Power          |                        | Power Input                      |
|                |                        | DC Jack                          |
|                |                        | Power Methods                    |
|                |                        | DC                               |
| Reliability    |                        | 12V 2.5A                         |
|                |                        | Power Adapter                    |
|                |                        | Input: 100 ~ 240 V, 50/60 Hz AC  |
|                |                        | Output: 12V 2.5A DC              |
|                | ESD Contact Protection | 4kV                              |
|                |                        | ESD Air Protection               |
|                |                        | 8kV                              |
|                |                        | Environment                      |
|                |                        | Operating Temperature:           |
|                |                        | 0 °C ~ 40 °C (32 °F ~ 104 °F)    |
|                |                        | Storage Temperature:             |
|                |                        | -40 °C ~ 70 °C (-40 °F ~ 158 °F) |
| Certifications | FCC, CE                | Operating Humidity:              |
|                |                        | 10% ~ 90% non-condensing         |
| Mechanical     | Dimension              | Storage Humidity:                |
|                |                        | 5% ~ 90% non-condensing          |
|                |                        | Φ116×202 mm                      |
|                |                        | Φ4.57×7.95 inches                |
|                | Installation           |                                  |
|                |                        | Desktop                          |



# 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                   | 256                     |
|          | Recommended Client Upper Limit | 100                     |
|          | 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                | Cellular Router         |
|          |                                | Wi-Fi Router            |
|          |                                | -                       |
|          | Mesh                           | Cudy Mesh Main          |
|          | Mesh Backhaul                  | Wireless Backhaul       |
|          |                                | Wired Backhaul          |
|          | Cellular APN                   | Band Select (Band Lock) |
|          |                                | Cellular Mode Select    |
|          |                                | Data Roaming            |
|          |                                | APN Profile             |
|          |                                | Manual APN Profile      |
|          |                                | MBN                     |
|          |                                | MTU Value               |

|         |                            |                        |
|---------|----------------------------|------------------------|
| General | Cellular Mode              | 5G NSA Only            |
|         |                            | 5G SA Only             |
|         |                            | 4G Only                |
|         |                            | 3G Only                |
|         |                            | Auto                   |
|         | WAN Mode                   | DHCP                   |
|         |                            | Static IP              |
|         |                            | PPPOE                  |
|         |                            | L2TP                   |
|         |                            | PPTP                   |
| Network | Internet Failover Sequence | WAN                    |
|         |                            | Cellular               |
|         |                            | -                      |
|         | QoS                        | Per-User Rate Limiting |
|         |                            | Address Reservation    |
|         |                            | DHCP Client List       |
|         |                            | Server                 |
|         | IPv6 Protocols             | IPv4/IPv6              |
|         |                            | Relay                  |
|         |                            | Dynamic (SLAAC/DHCPv6) |
|         |                            | Staic (Fixed IP)       |
|         |                            | Passthrough            |
|         |                            | 464XLAT                |
|         |                            | MAP-E                  |
|         |                            | DS-Lite                |
|         |                            |                        |
|         |                            |                        |
|         |                            |                        |
|         |                            |                        |
|         |                            |                        |
|         |                            |                        |



# Software Specs

|         |                           |                   |
|---------|---------------------------|-------------------|
| Network | IPTV/VLAN                 | Bridge            |
|         |                           | Tag VLAN          |
|         | 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                  |
|           | VPN Client             | L2TP                  |
|           |                        | WireGuard             |
|           |                        | OpenVPN               |
|           |                        | IPsec                 |
|           |                        | Zerotier              |
|           | DNS Options            | PPTP                  |
|           |                        | L2TP                  |
|           |                        | DNS over TLS          |
|           |                        | Manual DNS            |
|           |                        | Rebind Protection     |
|           | DNS over TLS Providers | Override Clients' DNS |
|           |                        | Cloudflare            |
|           |                        | Google                |
|           |                        | Quad9                 |
|           |                        | Custom                |
|           | Wake on LAN            | True                  |
|           | Online Detection       | True                  |



# Software Specs

|                       |                                            |                                |
|-----------------------|--------------------------------------------|--------------------------------|
| System                | LED Control                                | True                           |
|                       | Local Control Method                       | Config Web Page<br>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    |                                |
|                       | • Turkish • Vietnamese • Thai • Ukrainian  |                                |
|                       | • Polish • Norwegian • Portuguese          |                                |
|                       | • Simplified Chinese • Traditional Chinese |                                |

|             |                        |                      |
|-------------|------------------------|----------------------|
| Management  | All Devices Management | Wi-Fi Time Schedule  |
|             |                        | MAC Filter           |
|             |                        | IP/MAC Binding       |
|             | Per-Devices Management | Intenent On/Off      |
|             |                        | VPN On/Off           |
|             |                        | Online Time Schedule |
|             |                        | Device Rename        |
|             | Content Management     | Domain Filter        |
|             |                        | IP Filter            |
| Dashboard   | Panel                  | Internet Status      |
|             |                        | Mesh Status          |
|             |                        | Devices Management   |
|             |                        | Cellular Status      |
|             |                        | SMS Send and Receive |
|             |                        | WAN Status           |
|             |                        | LAN Status           |
|             |                        | -                    |
|             |                        | Wi-Fi Status         |
|             |                        | VPN Status           |
|             |                        | DHCP Server Status   |
|             |                        | System Version       |
|             |                        | Charts               |
|             | Cellular Speed         |                      |
|             | Internet Speed         |                      |
| Wi-Fi Speed |                        |                      |
|             |                        | -                    |

## CE DECLARATION OF CONFORMITY

For the following equipment:

**Product Name:** 5G NR SA/NSA AX3000 Wi-Fi 6 Router

**Model Number:** P4

**Trademark:** Cudy

We declare under our own responsibility that the above product satisfies all the technical regulations applicable to the product within the scope of Council Directives:

**Directive 2014/30/EU, Directive 2014/35/EU, Directive 2014/53/EU, Directive 2011/65/EU, Directive (EU) 2015/863**

The above product is in conformity with the following standards or other normative documents:

**EN 55032:2015+A1:2020+A11:2020**

**EN 55035:2017+A11:2020**

**EN IEC 61000-3-2:2019+A1:2021**

**EN 61000-3-3:2013+A2:2021**

**EN IEC 62368-1:2020+A11:2020**

**ETSI EN 301 489-1 V2.2.3 (2019-11)**

**ETSI EN 301 489-3 V2.3.2 (2023-01)**

**ETSI EN 301 489-17 V3.2.4 (2020-09)**

**ETSI EN 301 489-52 V1.2.1 (2021-11)**

**ETSI EN 300 328 V2.2.2 (2019-07)**

**ETSI EN 301 893 V2.1.1 (2017-05)**

**ETSI EN 300 440 V2.2.1 (2018-07)**

**ETSI TS 138 521-1 V17.10.0 (2023-10)**

**ETSI TS 138 521-3 V17.10.0 (2023-10)**

**ETSI EN 301 908-25 V15.1.1 (2024-10)**

**ETSI EN 301 908-1 V15.2.1 (2023-01)**

**EN 50385:2017**

**EN IEC 62311:2020**

**EN 62232:2017**

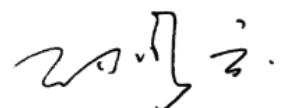
Person responsible for making this declaration:

Sun Qiaoyun

Regulatory Compliance Manager

Place of issue: Shenzhen, China

Date of issue: 2025-3-18



## ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ

Για τον ακόλουθο εξοπλισμό:

**Όνομα Προϊόντος:** 5G NR SA/NSA AX3000 Wi-Fi 6 Router

**Αριθμός Μοντέλου:** P4

**Εμπορικό Σήμα:** Cudy

Διακηρύσσουμε με κάθε ευθύνη ότι το παραπάνω προϊόν συμμορφώνεται με όλους τους τεχνικούς κανονισμούς που ισχύουν για το προϊόν, εντός του αντικειμένου των Κοινοτικών Οδηγιών:

**Οδηγία 2014/30/EE, Οδηγία 2014/35/EE, Οδηγία 2014/53/EE, Οδηγία 2011/65/EE, Οδηγία (EE) 2015/863**

Το παραπάνω προϊόν βρίσκεται σε συμμόρφωση με τα ακόλουθα πρότυπα ή άλλα έγγραφα συμμόρφωσης:

**EN 55032:2015+A1:2020+A11:2020**

**EN 55035:2017+A11:2020**

**EN IEC 61000-3-2:2019+A1:2021**

**EN 61000-3-3:2013+A2:2021**

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**EN 62232:2017**

Υπεύθυνος για τη δήλωση αυτή:

Sun Qiaoyun

Διευθυντής κανονιστικής συμμόρφωσης

Τόπος έκδοσης: Shenzhen, Κίνα

Ημερομηνία έκδοσης: 2025-3-18

