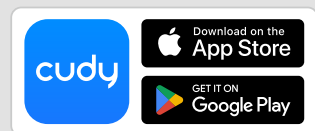
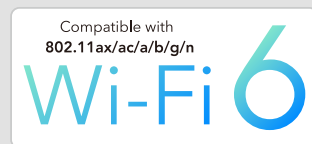




Model: P2

5G SA/NSA

AX3000 Wi-Fi 6 Router



Easy Setup with Cudy App



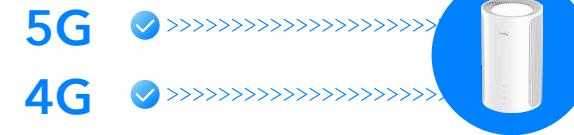
Datasheet



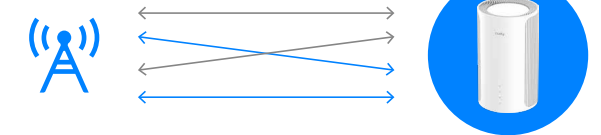
Connect All to the Lightning-Fast 5G

Super-Fast 5G up to 2.6 Gbps Download

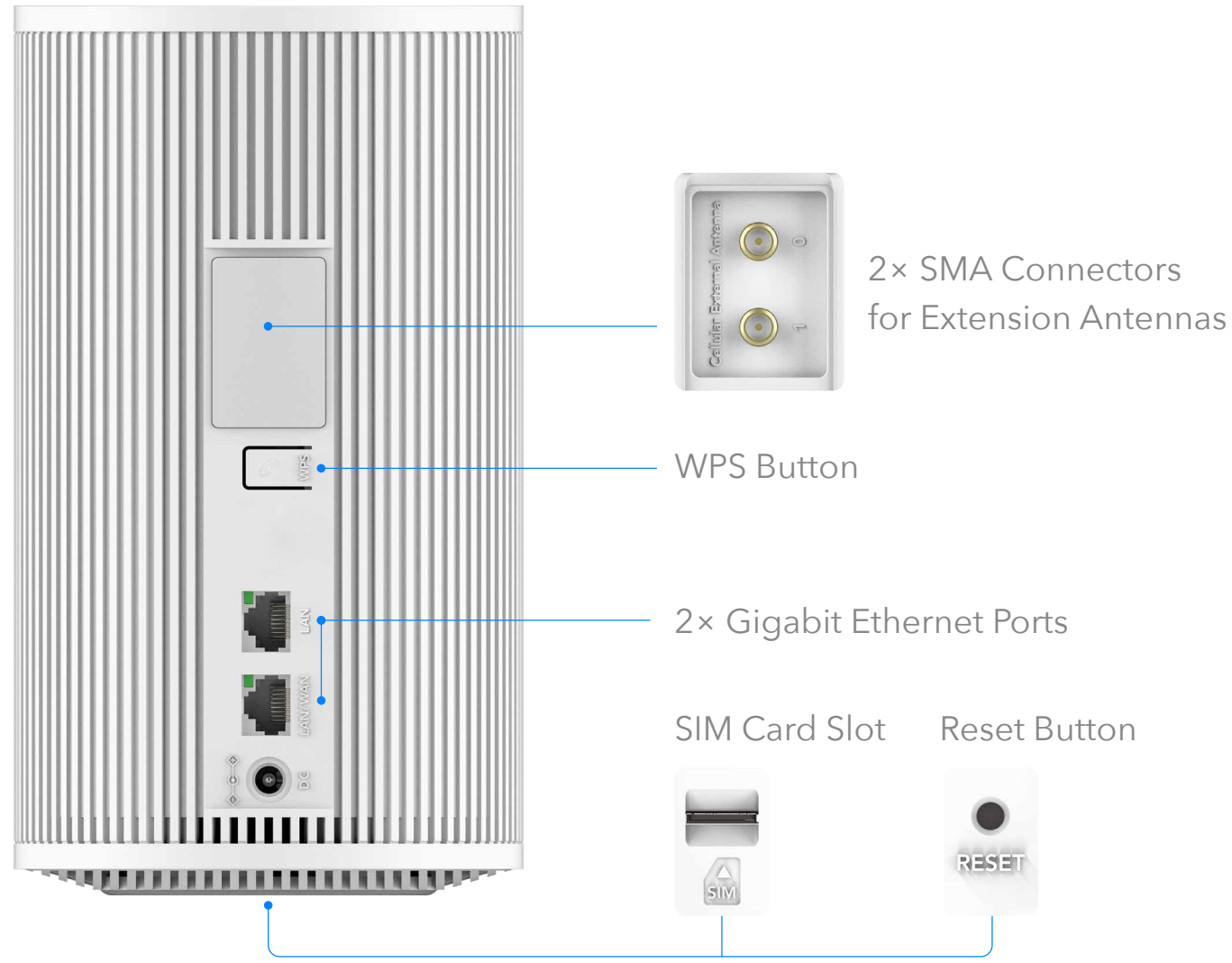
The 5G/4G Dual Connectivity and 4x4 MIMO accelerate internet speed and reduce network latency to provide premium networks for bandwidth/latency-sensitive applications.



5G/4G Dual Connectivity
Improves speed and roaming experience



4x4 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.

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 with a max 2.6 Gbps download speed. It features one SIM slot, a high-capacity AX3000 WiFi 6 for high-speed internet. The ISP clients can add a RJ11 port for VoIP/VoNR service.

- 5G Rel. 15 with Max 2.6 Gbps DL
- 5G/4G Dual Connectivity, 4×4 MIMO
- 4-Stream Dual-Band Wi-Fi 6
- 2402 Mbps + 574 Mbps Wi-Fi
- 2× Gigabit Ethernet Ports
- 1× Nano SIM Slot
- Cudy Mesh, VPN Server and Client
- Cudy App, Cloud Control

Package Content

- P2
- 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) DDR3L |
| Cellular | Cellular Standards | 5G Rel. 15 DL 4G Cat. 12/ UL 4G Cat. 13 |
| | 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 |
| | EU Version Cellular | Suitable Region |
| | Max DL Speed | 2.6 Gbps (NSA), 2 Gbps (SA) |
| | Max UL Speed | 650 Mbps (NSA), 1 Gbps (SA) |
| | Advanced | DL/UL 4CA, DL 4×4, UL 2×2 MIMO |
| | Cellular Bands | 5G Sub 6 GHz: n1/3/5/7/8/20/28/38/40/41/66/77/78 LTE-FDD: B1/2/3/4/5/7/8/20/28/38/40/41/66 WCDMA: B1/2/5/8 |

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) with an Extra Stream |
| | 2.4 GHz Wi-Fi Streams | 2T2R (2×2 MIMO) |
| | Wi-Fi Antennas | Internal |
| | Beamforming | True |
| | FEM or PA/LNA | 5 GHz: 3× Internal 2.4 GHz: 2× Internal |
| | 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 | 2 |
| | Ethernet Notes | One WAN/LAN, one LAN |
| | FXS Ports | 1× RJ11 (VoNR/VoLTE) (Optional for ISP order) |

| | | | |
|---------------------|------------------------|--|----------------------------------|
| Interfaces | LED | Power | |
| | | Internet | |
| | | Wi-Fi | |
| | | Cellular | |
| | Power Input | DC Jack | |
| Power | Power Methods | DC | |
| | DC | 12V 1.5A | |
| | Power Adapter | Input: 100 ~ 240 V, 50/60 Hz AC Output: 12V 1.5A DC | |
| Reliability | 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) |
| Operating Humidity: | | 10% ~ 90% non-condensing | |
| | Storage Humidity: | 5% ~ 90% non-condensing | |
| Certifications | FCC, CE | | |
| Mechanical | Dimension | 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 |
| WPS | True | |
| General | Operation Modes | Cellular Router |
| | | Wi-Fi Router |
| | | WISP |
| | 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 |
| Internet Failover Sequence | WAN | |
| | WISP | |
| | Cellular | |
| | Per-User Rate Limiting | |
| | Address Reservation | |
| Network | QoS | DHCP Client List |
| | | Server |
| | | IP Versions |
| | IPv6 Protocols | IPv4/IPv6 |
| | | Relay |
| | | Dynamic (SLAAC/DHCPv6) |
| | | Static (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 App Control |
| | Remote Control Method | Config Page via HTTPS App Control |
| | Firmware Upgrade | TR069/TR098/TR111/TR181 Local Update App (Over the Air) Online Update |
| | Reliability | Timed Reboot Backup and Restore |
| | Diagnostic Tools | Diagnosis Ping Traceroute NSLookup System Log |
| | Languages | <ul style="list-style-type: none"> • 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 | Parental Controls | Profiles Settings Offline Time Online Time Pause the Internet Web Filter |
| | All Devices Management | Wi-Fi Time Schedule MAC Filter IP/MAC Binding |
| | Per-Devices Management | Intenet 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, WISP Status, Wi-Fi Status, VPN Status, DHCP Server Status, System Version |
| | Charts | Mesh Topology, Cellular Speed, Internet Speed, WISP Speed, Wi-Fi Speed |