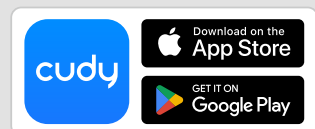
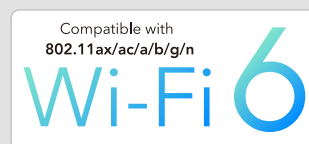




Model: P2

5G SA/NSA

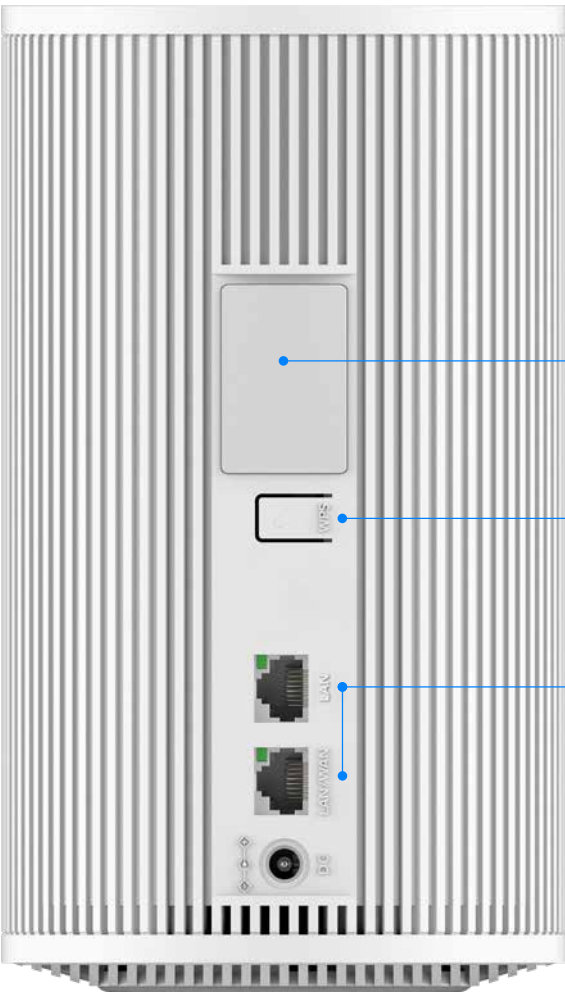
AX3000 Wi-Fi 6 Router



Easy Setup with Cudy App

[Datasheet](#)





2× SMA Connectors
for Extension Antennas



WPS Button



2× Gigabit Ethernet Ports



SIM Card Slot



Reset Button



Connect All to the Lightning-Fast 5G

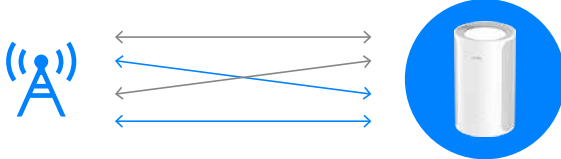
Super-Fast 5G up to 2.6 Gbps Download

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

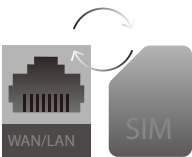
High-Capacity Wi-Fi 6

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.

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
- UL/DL 4CA, 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	256 MB (2 Gbit) DDR3
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, US
EU Version Cellular	Suitable Region	Europe, Middle East, Africa, Asia-Pacific (Excluding NA), Latin America
	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	Power Input	DC Jack
		DC
		12V 1.5A
		Power Adapter
Reliability	ESD Contact Protection	Input: 100 ~ 240 V, 50/60 Hz AC
		Output: 12V 1.5A DC
	ESD Air Protection	4kV
	Environment	8kV
		Operating Temperature:
		0 °C ~ 40 °C (32 °F ~ 104 °F)
		Storage Temperature:
Certifications	FCC, CE	-40 °C ~ 70 °C (-40 °F ~ 158 °F)
		Operating Humidity:
Mechanical	Dimension	10% ~ 90% non-condensing
		Storage Humidity:
	Installation	5% ~ 90% non-condensing
Mechanical	Dimension	Desktop
		Φ116×202 mm
	Installation	Φ4.57×7.95 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	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
		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
Network	Internet Failover Sequence	WAN
		WISP
		Cellular
		Per-User Rate Limiting
		Address Reservation
	QoS	DHCP Client List
		Server
		IP Versions
		IPv6 Protocols
		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 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
Dashboard	Content Management	Device Rename
		Domain Filter
		IP Filter
	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