

AX
3000

cudy

AX3000 Gigabit Wi-Fi 6 Mesh Router

WR3000

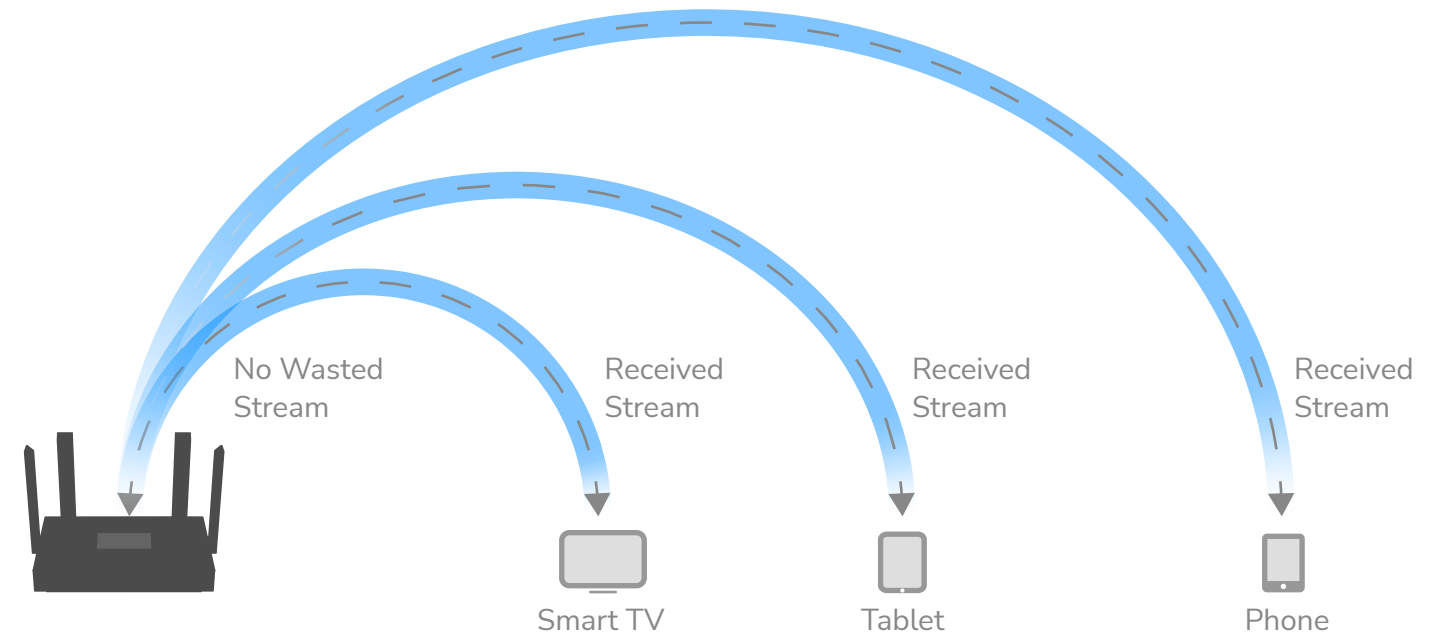
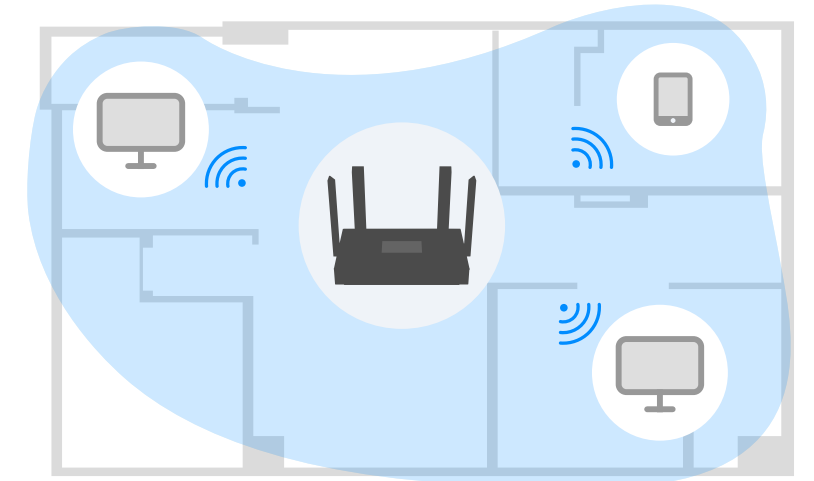
Datasheet



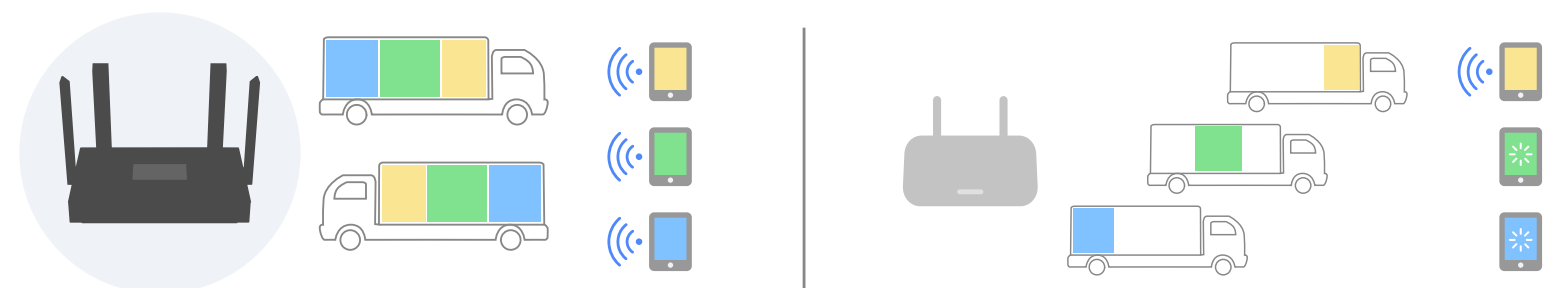
Up to 3.0 Gbps Wi-Fi 6 Speed: Enjoy smooth streaming, downloading, and gaming with extremely fast Wi-Fi 6 Speed.

Features

Extensive Coverage: Beamforming, and four antennas combine to deliver focused reception to devices far away.



DL/UL MU-MIMO



DL/UL OFDMA

Without OFDMA

More Devices: Wi-Fi 6 uses OFDMA to improve capacity and efficiency of your network, so more devices can connect without slowing down your Wi-Fi.

Highlights

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

- 4-Stream Dual-Band Wi-Fi 6
- 2402 Mbps + 574 Mbps Wi-Fi
- 4× Gigabit Ethernet Ports
- 70 Connected Devices
- Covers 120 m² (1,300 ft²)
- Cudy Mesh, VPN Server and Client
- Cudy App, Cloud Control

Package Content

- WR3000
- Power Adapter
- Ethernet Cable
- Installation Guide

Hardware Features

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	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	4x Fixed
	5 GHz Antenna Gain Max	4.8 dBi
	2.4 GHz Antenna Gain Max	3.4 dBi
	FEM or PA/LNA	5 GHz: 2× Internal
		2.4 GHz: 2× Internal
	Beamforming	True
	Range Performance	Max: 170 m (558 ft)
		Indoor WiFi range varies depending on the layout and wall materials.
	Wall Performance	Two wooden walls with thickness < 10 cm (4")
		One concrete wall with thickness < 20 cm (7")



Hardware Specs

Interfaces	Gigabit WAN Ports	1
	Gigabit LAN Ports	3
	LED	System, Internet, WAN, LAN, 2.4 GHz Wi-Fi, 5 GHz Wi-Fi
	Physical Buttons	WPS Button Reset Button
	Power Input	DC Jack
Power	Power Methods	DC
	DC	12V 1A
	Power Adapter	Input: 100 ~ 240 V, 50/60 Hz AC Output: 12V 1A DC
	Max Power Consumption (W)	8.8W
	Idle Power Consumption (W)	2.5W
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
Mechanical	Installation	Desktop, Wallmount
	Dimension	183.3×109×35 mm
		7.22×4.29×1.38 inches
	Weight	296g

Ordering Information	Retail Package Weight	614g
	Retail Package Dimension	176×140.5×56 mm 6.93×5.53×2.2”“
	Units per Carton	20
	Carton Dimension	60×30×37.5 cm 23.62×11.81×14.76”
	Carton Gross Weight	13.5kg
	Carton Net Weight	12.3kg

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	128
	Recommended Client Upper Limit	70
	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	Wi-Fi Router
		Access Point
		Range Extender
		WISP
		Client

Software Specs

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

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
Utilities	VPN Server and Client	RTSP Passthrough
		WireGuard
		OpenVPN
		IPsec
		PPTP
		L2TP



Software Specs

Utilities	DNS Options	DNS over TLS
		Manual DNS
		Rebind Protection
		Override Clients' DNS
	DNS over TLS Providers	Cloudflare
		Google
		Quad9
		Custom
	Wake on LAN	True
Management	Online Detection	True
	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	Intenent On/Off
		VPN On/Off
		Online Time Schedule
		Device Rename
	Content Management	Domain Filter
		IP Filter

System	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



Software Specs

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