



Model: WR21000

BE21000 10G Tri-Band Mesh Wi-Fi 7 Router





Highlights

A ultra-fast tri-band WiFi 7 router with 20.8 Gbps Wi-Fi and a 10G SFP+ slot, catering to latency-sensitive, speed-demanding, and large-scale scenarios with 10 Gbps internet.

- Qualcomm 1.5 GHz Quad-Core CPU
- 10-Stream Tri-Band Wi-Fi 7
- 11.5 Gbps + 8.6 Gbps + 688 Mbps 1
- 1× 10G SFP+
- 4× 2.5G Ethernet Ports
- 1× USB 3.0 Port
- 100 Connected Devices
- Cudy Mesh, VPN Server and Client
- Cudy App, Cloud Control

Package Content

- WR21000
- Power Adapter
- Ethernet Cable
- Installation Guide

Hardware Specs

CPU	CPU Details	1.5 GHz Quad-Core CPU, ARM Cortex-A53
Memory /Storage	Flash/ROM	128 MB (1 Gbit) NAND
	DDR/RAM	1 GB (8 Gbit) DDR4
Wireless	6 GHz Wi-Fi Speed	11520 Mbps
	5 GHz Wi-Fi Speed	5765 Mbps (160 MHz)
		8647 Mbps (240 MHz)
	2.4 GHz Wi-Fi Speed	688 Mbps
	6 GHz Wi-Fi Streams	4T4R (4×4 MIMO)
	5 GHz Wi-Fi Streams	4T4R (4×4 MIMO)
	2.4 GHz Wi-Fi Streams	2T2R (2×2 MIMO)
	Wi-Fi Antennas	8× Fixed
	6 GHz Antenna Gain Max	4dBi
	5 GHz Antenna Gain Max	4dBi
	2.4 GHz Antenna Gain Max	3.5dBi
	FEM or PA/LNA	6 GHz: 4× High-Power
		5 GHz: 4× High-Power
		2.4 GHz: 2× High-Power
	Beamforming	True
	Range Performance	Max: 240 m (787 ft)
		Tested in open-space environments with minimal interference. Actual WiFi range may vary depending on layout and wall materials. Refer to the Wall Performance specifications for placement suggestions.
	Wall Performance	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	10G SFP+ Slots	1
	2.5G RJ45 Ports	4
	Ethernet Notes	The SFP+ slot is WAN/LAN configurable, 1× WAN port, and the rest ports are LAN ports.
	USB-A 3.0 Ports	1
	LED	• System • Mesh • Wi-Fi • LAN
	Physical Buttons	WPS Button Reset Button
	Power Input	DC Jack
Power	Power Methods	DC
	DC	12V 3A
	Power Adapter	Input: 100 ~ 240 V, 50/60 Hz AC Output: 12V 3A DC
	Max Power Consumption (W)	36W
	Idle Power Consumption (W)	15W
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
	Dimension	Φ116×202 mm Φ4.57×7.95 inches
Ordering Information	Retail Package Dimension	1-Pack:
		313×152×132 mm
		12.32×5.98×5.2 inches



Software Specs

Wireless	Wi-Fi Standards	Wi-Fi 7
	Max Wi-Fi Modulation	4K-QAM
	Wi-Fi Efficiency	MLO
		MRU
		Puncturing
		OFDMA
		MU-MIMO
		BSS Color
	Max Wi-Fi Channel Width	320 MHz
	Wi-Fi Security	WPA/WPA2/WPA3
General	Guest Network	2.4 GHz, 5 GHz, 6 GHz
	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
	WAN Mode	DHCP / Static IP /
		PPPOE / PPTP / L2TP
	Internet Failover Sequence	WAN
		WISP

Network	QoS	Per-User Rate Limiting
	DHCP	Address Reservation
		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
	Tag VLAN	
	VoIP VLAN	
	IPTV VLAN	
	TTL Customization	Extend
		Spoof
		Custom
	IGMP	IGMP Proxy
		IGMP Snooping
	Forwarding	Port Forwarding
		Port Triggering
		UPnP
		DMZ



Software Specs

Network	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
	VPN Server & VPN Client	WireGuard
		OpenVPN
		IPsec
		Zerotier
		PPTP
		L2TP
		DNS over TLS
Utilities	DNS Options	Manual DNS
		Rebind Protection
		Override Clients' DNS

Utilities	DNS over TLS Providers	Cloudflare
		Google
		Quad9
		Custom
	USB Functions	Samba Server
Management	Wake on LAN	True
	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	Internet On/Off
		VPN On/Off
		Online Time Schedule
System	Content Management	Device Rename
		Domain Filter
		IP Filter
	LED Control	True
	Local Control Method	Config Web Page
		App Control



Software Specs

System	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
		Croatian	Hungarian	Italian
		Japanese	Khmer	Korean
		Dutch	Norwegian	Polish
		Portuguese	Romanian	Russian
		Slovak	Swedish	Thai
		Turkish	Ukrainian	Vietnamese
		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