



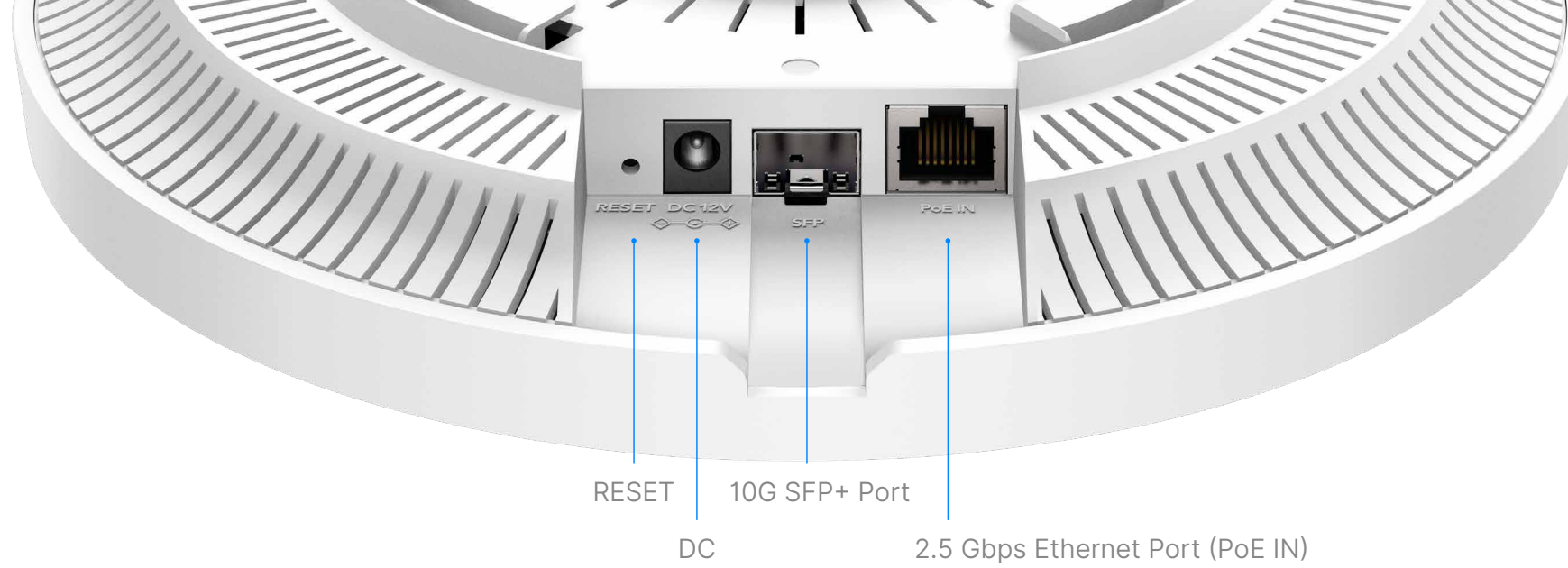
Model: AP6500

# BE6500

Ceiling Mount Dual-Band  
Wi-Fi 7 Access Point



[Datasheet](#)



### Next-Gen Wi-Fi 7 for High-Density Business Networks

Powered by 2.0 GHz Quad-Core CPU, Cudy AP6500 delivers BE6500 Wi-Fi 7 performance with 4x4 MIMO on 5 GHz and 2x2 MIMO on 2.4 GHz.

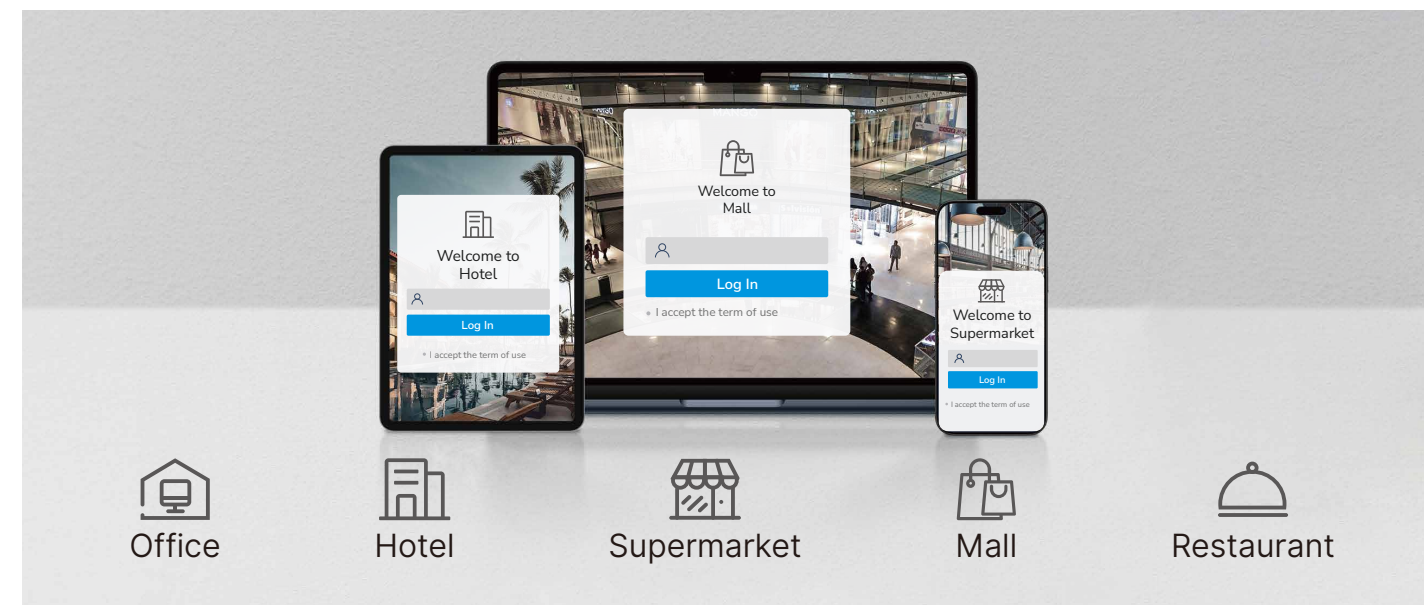
Experience wireless speeds up to 6.5 Gbps, ideal for high-density deployments in offices, campuses, and hospitality venues.

2.4 GHz **688 Mbps** Multi-Link Operation

5 GHz **5765 Mbps**

### Custom Captive Portal

Engage new users with a personalized login page while meeting access control needs.



### 10G SFP+ & 2.5G PoE

Equipped with a 10G SFP+ uplink port and a 2.5G Ethernet port (PoE IN), it provides flexible high-speed backhaul and simplified power delivery.

### Seamless Coverage with Cudy Mesh

Enable a smooth Wi-Fi experience across large areas. Cudy Mesh keeps devices connected as users move from room to room—no network switching required.



### Smart Centralized Management

Seamlessly integrates with Cudy AP Controller for streamlined network deployment and maintenance.

- Quick Setup
- Batch Configuration
- Batch Upgrade
- Multi-SSID
- Reboot Schedule



# Highlights

A wall/ceiling-mounted WiFi 7 AP designed for high-demand deployments in hospitality, education, and transportation environments, featuring a 10G SFP slot and a 2.5G PoE IN port.

- 6-Stream Dual-Band Wi-Fi 7
- Broadcom 2 GHz Quad-Core CPU
- 1x Shielded 2.5GbE PoE IN, 10G SFP+ Slot
- 5765 Mbps + 688 Mbps Wi-Fi
- 802.3at/af, Passive PoE, DC
- 200 Connected Devices
- Multi-AP Management
- Captive Portal, VLAN SSID

# Package Content

- AP6500
- Mounting Kit
- Installation Guide
- PoE Adapter (\_P Model Only)
- Ethernet Cable (\_P Model Only)

# Hardware Specs

CPU	CPU Details	2.0 GHz Quad-Core, ARM Cortex-A7
Memory/Storage	Flash/ROM	128 MB (1 Gbit) NAND
	DDR/RAM	512 MB (4 Gbit) DDR4

Wireless	5 GHz Wi-Fi Speed	5765 Mbps
	2.4 GHz Wi-Fi Speed	688 Mbps
	5 GHz Wi-Fi Streams	4 Spatial Streams
	2.4 GHz Wi-Fi Streams	2 Spatial Streams
	Wi-Fi Antennas	6x Internal
	FEM or PA/LNA	5 GHz: 4x External 2.4 GHz: 2x Internal
	Beamforming	True
	Range Performance	Max: 220 m (722 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")
	Interfaces	10G SFP+ Slots
2.5G RJ45 Ports		1
Ethernet Notes		Accepts PoE powering
LED		System
Physical Buttons		Reset Button
Power Input		DC Jack PoE via Ethernet Port
Power	Power Methods	DC
		Passive PoE
		802.3at/af PoE



# Hardware Specs

Power	Power Input	DC: 12V=1.5A Passive PoE: 48-57V= PoE: 802.3at/af
	Power Adapter Note	AP6500   No adapter in the box AP6500_P   PoE Adapter in the box: Input: 100-240V~, 50/60Hz Output: 48V = Passive PoE
	Max Power Consumption (W)	18W
	Reliability	Advanced Hardware Watchdog EMC ESD: Contact: 4kV; Air: 8kV 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	Wall-mount Ceiling-mount
	Dimension	231.9×231.9×57.1 mm 9.13×9.13×2.25 inches
	Product Weight	536.0 g (18.91 oz.)

Ordering Information	Retail Package Weight	EU: 929.3 g (32.78 oz.)
	Retail Package Dimension	310×238×73 mm 12.2×9.37×2.87 inches
	Units per Carton	10
	Carton Net Weight	EU: 9.3 kg (20.5 lbs)
	Carton Gross Weight	EU: 10.2 kg (22.49 lbs)
	Carton Dimension	49.5×38.7×33.2 cm 19.49×15.24×13.07 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 Capacity	512
	Recommended Client Upper Limit	200
	Max Wi-Fi Channel Width	160 MHz
	Wi-Fi Security	WPA/WPA2/WPA3
	Multi-SSID (Max Number)	8 SSIDs (Up to 4 SSIDs on each band), VLAN Support
WPS	True	
General	Operation Modes	Wi-Fi Router
		Access Point
	Mesh	Cudy Mesh
	Mesh Backhaul	Wireless Backhaul
		Wired Backhaul
	Multi-Band Backhaul	True
WAN Mode	DHCP	
	Static IP	
	PPPOE	

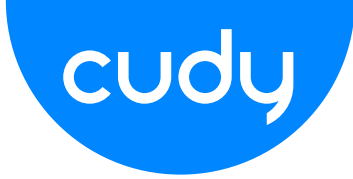
General	WAN Mode	PPTP
		L2TP
Network	QoS	Per-User Rate Limiting
		Address Reservation
	DHCP	DHCP Client List
		Server
	IP Versions	IPv4/IPv6
	IPv6 Protocols	Relay
		Dynamic (SLAAC/DHCPv6)
		Static (Fixed IP)
		Passthrough
		464XLAT
	IPTV/VLAN	MAP-E
		DS-Lite
		Tag VLAN
TTL Customization	Extend	
	Spoof	
	Custom	
IGMP	IGMP Proxy	
	IGMP Snooping	
Forwarding	Port Forwarding	
	Port Triggering	



# Software Specs

Network	Forwarding	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	Captive Portal	True
	VPN Server	WireGuard
		OpenVPN
		IPsec
		Zerotier
		PPTP
		L2TP
		VPN Client
	OpenVPN	
	IPsec	
	Zerotier	

Utilities	VPN Client	PPTP
		L2TP
	DNS Options	DNS over TLS
		Manual DNS
		Rebind Protection
		Override Clients' DNS
	DNS over TLS Providers	Cloudflare
		Google
		Quad9
		Custom
	Wake on LAN	True
	Online Detection	True
Management	Multi-AP Management	Supported via Cudy AP Controller
	All Devices Management	Wi-Fi Time Schedule
		MAC Filter
		IP/MAC Binding
	Per-Devices Management	Internet On/Off
		VPN On/Off
		Online Time Schedule
Device Rename		
Content Management	Domain Filter	
	IP Filter	
System	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/TR143/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	<ul style="list-style-type: none"> <li>• English • Bengali • Catalan • Czech</li> <li>• German • Greek • Spanish • French</li> <li>• Hebrew • Italian • Croatian • Hungarian</li> <li>• Khmer • Korean • Dutch • Japanese</li> <li>• Russian • Slovak • Swedish • Romanian</li> <li>• Turkish • Vietnamese • Thai • Ukrainian</li> <li>• Polish • Norwegian • Portuguese</li> <li>• Simplified Chinese • Traditional Chinese</li> </ul>
Dashboard	Panel	Internet Status Mesh Status Devices Management

Dashboard	Panel	WAN Status LAN Status Wi-Fi Status VPN Status DHCP Server Status System Version
	Charts	Mesh Topology Internet Speed Wi-Fi Speed