ComX Computers
Product Specification Sheet

WU6500

Cudy BE6500 Tri-band WiFi 7 USB 3.0 Adapter

Product Overview

Cudy WU6500 BE6500 Tri-band WiFi 7 USB 3.0 Adapter, 2282 Mbps 6GHz Wi-Fi Speed, 2882 Mbps @ 5GHz Wi-Fi Speed, 688 Mbps @ 2.4GHz Wi-Fi Speed, 2 Wi-Fi antennas, Requires a USB 3.0 or higher Standard











Specifications

Overview Summary:

Upgrade your connectivity with the Cudy WU6500 WiFi 7 USB adapter, engineered for ultra-fast speeds and stable performance across 2.4GHz, 5GHz, and 6GHz bands. Ideal for South African users looking to enhance their desktop or laptop networking, this compact adapter delivers reliable high-speed internet for streaming, gaming, and productivity without complicated setup.

With USB 3.0 support and advanced WiFi 7 features, it ensures lower latency, improved efficiency, and secure connections through WPA3 encryption. Whether you're working from home or upgrading your gaming setup, this adapter provides a simple and effective solution. Buy now and experience next-generation wireless performance.

Performance tier: High-end

Uses:gaming, streaming, remote work, file downloads, upgrading desktop WiFi, laptop connectivity

Overview:

Cudy WU6500 WiFi 7 USB Adapter for High-Speed Tri-Band Connectivity
Experience next-generation wireless performance with WiFi 7, designed for users who require consistent speed, low latency, and reliable connectivity. The Cudy WU6500 delivers a noticeable upgrade for desktops and laptops, enabling faster downloads, smoother streaming, and more responsive online applications. Built for modern networks, it supports demanding environments where multiple devices operate simultaneously without compromising performance.

Description:

The Cudy WU6500 WiFi 7 USB adapter brings tri-band wireless capability to your PC or laptop through a high-speed USB 3.0 interface. It supports ultra-fast data rates across 6 GHz, 5 GHz, and 2.4 GHz bands, ensuring flexibility and optimal performance depending on network conditions. With dual antennas, 2x2 MIMO technology, and advanced efficiency features, it enhances signal stability and reduces congestion. Designed for ease of use, it offers quick installation on Windows systems while maintaining strong security with WPA3 encryption. This adapter is well suited for gaming, streaming, and professional workloads that depend on stable, high-throughput connectivity.

Features:

High-Speed WiFi 7 Performance for Modern Networks
The WU6500 introduces a substantial leap in wireless capability. With speeds reaching up to 2882 Mbps on 5 GHz and 2282 Mbps on 6 GHz, it enables high-bandwidth activities such as 4K streaming, large file transfers, and competitive gaming with minimal lag. The inclusion of 4K-QAM modulation and 160 MHz channel width increases data density and throughput, ensuring efficient use of available bandwidth.

Stable Connections with Advanced Signal Technology
Equipped with two high-gain antennas and full 2x2 MIMO support across all bands, the adapter maintains strong and stable connections even in complex environments. Technologies such as OFDMA, MU-MIMO, and BSS Colour improve network efficiency by reducing interference and optimizing how multiple devices share bandwidth.

Key performance advantages include:

- Faster data transmission across all three bands for consistent connectivity
- Improved signal strength and coverage using dual antennas
- Reduced congestion in multi-device environments through intelligent traffic handling

Simple Setup with Strong Security Standards
Installation is straightforward with plug-and-play support via USB 3.0, allowing immediate performance benefits without complex setup. The adapter automatically installs drivers on supported Windows systems, minimizing downtime. WPA3 encryption enhances network protection, helping safeguard sensitive data from unauthorized access.

Technical Details and Key Specifications
Core hardware and wireless capabilities:

- Part Number / SKU: WU6500
- Tri-band WiFi support: 6 GHz, 5 GHz, and 2.4 GHz
- Maximum speeds: 2282 Mbps (6 GHz), 2882 Mbps (5 GHz), 688 Mbps (2.4 GHz)
- MIMO configuration: 2x2 across all bands
- Antennas: 2 high-gain antennas with up to 3 dBi gain
- WiFi standard: WiFi 7 with 4K-QAM modulation
- Channel width: up to 160 MHz

System compatibility and requirements:

- Interface: USB 3.0 or higher required for full performance
- Operating system: Windows 10 and Windows 11
- 6 GHz support requires Windows 10 version 22H2 or later
- Automatic driver installation supported

Environmental and physical details:

- Operating temperature: 0 C to 40 C
- Storage temperature: -40 C to 70 C
- Humidity: 10 percent to 90 percent non-condensing
- Compact size: 2.9 x 1.3 x 8.9 cm
- Weight: 25.2 g

Security and efficiency technologies:

- WPA, WPA2, WPA3 encryption
- OFDMA and MU-MIMO for efficient bandwidth usage
- BSS Colour and puncturing to reduce interference

What is Included

- Cudy WU6500 WiFi 7 USB adapter
- Installation guide

Reliable Upgrade for High-Demand Users
The Cudy WU6500 provides a practical upgrade path for users seeking improved wireless performance without replacing their entire system. Its combination of speed, stability, and modern wireless standards makes it suitable for professional use, gaming setups, and households with heavy internet usage. With SKU WU6500, it positions itself as a forward-looking solution for current and emerging connectivity demands.

Specifications:

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Specifications

Product Code	WU6500
Model Version	WU6500 1.0
Wireless	
6 GHz Wi-Fi Speed	2282 Mbps
5 GHz Wi-Fi Speed	2882 Mbps
2.4 GHz Wi-Fi Speed	688 Mbps
6 GHz Wi-Fi Streams	2T2R (2x2 MIMO)
5 GHz Wi-Fi Streams	2T2R (2x2 MIMO)
2.4 GHz Wi-Fi Streams	2T2R (2x2 MIMO)
Wi-Fi Antennas	2
5 GHz Antenna Gain Max	3 dBi
2.4 GHz Antenna Gain Max	3 dBi
Interfaces	
LED	System
Environment	
Operating Temperature	0 degreesC ~ 40 degreesC (32 degreesF ~104 degreesF)
Storage Temperature	-40 degreesC ~ 70 degreesC (-40 degreesF ~ 158 degreesF)
Humidity	10% ~ 90% non-condensing
Storage Humidity	5% ~ 95% non-condensing
Wireless Software Specs	
Wi-Fi Standards	Wi-Fi 7
Max Wi-Fi Modulation	4K-QAM
Wi-Fi Efficiency	MRU , Puncturing , OFDMA , MU-MIMO , BSS Color
Max Wi-Fi Channel Width	160 MHz
Wi-Fi Security	WPA/ WPA2/WPA3
System Requirements	
Hardware Requirement	Requires a USB 3.0 or higher standard , USB port for full speed
Compatible OS	Windows 10/11 or later OS
Driver Installation	Auto driver installation on Windows 10/11. The 6 GHz Wi-Fi band is only supported on Windows 10 version 22H2 and later.
Certifications	FCC, CE
Colour	Black
Product Dimensions	2.9 x 1.3 x 8.9 cm
Product Weight	25.2g

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page: https://www.comx.co.za/WU6500-Cudy-BE6500-Tri-band-WiFi-7-USB-3-0-Adapter-p-336013.php

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