# C4000



## Wi-Fi 6 Router

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#### **PRODUCT OVERVIEW**

Leading the next generation of WiFi, the C4000 WiFi 6 Router is powered by the industry's latest WiFi 6 802.11 standard with 4X increased data capacities in a dense environment to handle current and future home networks. Lightning-fast combined WiFi speeds power ultra-smooth 4K streaming, online gaming, smart home automation, and more.



#### **AT A GLANCE**

Get ultra-fast wireless speeds for better 4K streaming, gaming, or video conferencing experience.

- Up to 6 Gbps Speed 1.2+4.8 Gbps with 4-stream connectivity†
- 4x4 MU-MIMO<sup>‡</sup>- Go faster by simultaneously streaming to multiple devices
- Networking Optimized Dual-Core Processor

  Powerful processor boosts wireless, wired and WAN-to-LAN performance
  - **160MHZ Channel Support\*** Doubles the speeds as offered by 80MHz channels to provide gigabit speeds for compatible mobile devices and laptops

- 1024-QAM 38% increase in data rate compared to 256-QAM 802.11ac
- One WiFi SSID for the entire home

#### **KEY FEATURES**

- 4X Better Performance than an AC Router
   4-stream WiFi with up to 1.2+4.8 Gbps† for ultrafast wireless speeds\*\*
- More WiFi for More Devices
   OFDMA allows efficient data transmission on up to eight devices at the same time. Uplink OFDMA

eight devices at the same time. Uplink OFDMA improves scheduling for multiple clients with varying bandwidth requirements§

- Up to Three Simultaneous .11ac Wi-Fi Streams
   3-stream MU-MIMO enables up to three 1x1 devices at the same time
- WiFi 6 supports all current Wi-Fi devices
   Backward compatible with 802.11a/b/g/n/ac client devices

#### Powerful Processor

1 GHz dual-core InterAptiv processor provides a next generation packet offload engine that ensures smooth 4K UHD streaming and gaming

- Dynamic QoS: Prioritizes internet traffic by application and device for smoother streaming
- Five Gigabit Ports (1 WAN + 4 LAN)
   Connect more wired devices for faster file transfer and uninterrupted connections
- Smart Connect

Intelligently selects the fastest WiFi band for every device connection

• Target Wake Time

TWT significantly improves battery life in WiFi devices such as cell phones and IoT devices

#### Capacity

- Get better performance for all your smart home devices even when your family is busy streaming videos or uploading media files during the internet rush hour.
- **MU-MIMO**<sup>‡</sup>: Increases bandwidth efficiency by enabling multiple devices to download content at the same time.
- More WiFi for More Devices: Supports a total of 256 clients (128 per band)

#### WiFi Range

- Faster and expanded coverage throughout your home and for all devices.
- Ultimate Range: Hi-power amplifiers can increase WiFi coverage throughout large homes.
- **High Performance Antennas:** Eight internal antennas provide reliable WiFi coverage over a large area. Antennas are optimized for the WiFi performance.

#### **Reduced Latency**

- **BSS Coloring:** The access point and clients can ignore neighboring network channel contention, providing system capacity gain and a significant reduction in latency.
- **OFDMA:** Reduces contention and preamble overhead by optimally designating portions of a single WiFi frame to multiple clients, which can reduce latency.

#### **Reliable Connections**

With advanced features and best-in-class technology, you'll reduce interference and enjoy more reliable WiFi connectivity.

- **Beamforming:** Improves range and performance for both 2.4 and 5GHz
- **Simultaneous Dual Band WiFi:** Supports both WiFi bands simultaneously to increase available bandwidth and provides a reliable WiFi network for smooth online gaming without any network congestion.
- Pre-Optimized Antennas: The C4000 antennas come pre-optimized for WiFi performance.
- QOS: Prioritizes internet traffic by application and device for smoother streaming.

#### Security

- Standards-based WiFi WPA3 security
- Guest network access: Separate and secure
- Automatic firmware update delivers latest security patches to the router

#### **Technical Specifications**

#### WiFi 6 Dual Band Wi-Fi

- 2.4 GHz: 4x4 (Tx/Rx) 1024 QAM 40MHz, up to 1.2Gbps
- 5 GHz: 4x4 (Tx/Rx) 1024 QAM 160MHz, up to 4.8Gbps
- Backwards compatible with 802.11a/b/g/n/ac Wi-Fi
- OFDMA Uplink and Downlink
- 1024-QAM
- 160MHz channel support\*
- Dual-Core 1 Ghx MIPS InterAptiv Processor
- Programmable BSS Coloring
- Supports UNII-1, UNII-2 & UNII-2x (DFS), UNII-3 channels
- Zero-Wait DFS re-entry
- MU-MIMO Downlink (VHT only, Supported modes: 3x1SS or 2x2SS or 2SS+1SS)<sup>‡</sup>
- High Power Wi-Fi amplifiers
- Five 10/100/1000 Mbps gigabit Ethernet ports one WAN/LAN and for LAN

- IPv6 Support (Internet Protocol Version 6)
- Multi-color LED status ring
- WPS button: Allows easy connection of devices to the network
- WPA3: Enables more robust security for networks
- Reset button
- SFP Port: Plug in selected GPON or Ethernet SFP modules for 2Gb/s DL WAN connectivity

#### **Model & Physical Specifications**

#### C4000 - WiFi 6 Fiber Router

- Item Weight 2.86 lbs (1300g)
- Item Dimensions 8.30 (H), 5.64 (Bottom),
   4.68 (Top) inch

- Package & Item Weight 4.09 lbs (1855.2g)
- Package Dimensions 9.96 (L) x 8.78 (W) x 7.52 (H) inch
- † Maximum wireless signal rate derived from IEEE 802.11 specifications. Actual data throughput and wireless coverage will vary and may be lowered by network and environmental conditions, including network traffic volume and building construction.
- ‡ MU-MIMO capability requires both router and client device to support MU-MIMO
- \* Requires client device that supports 160MHz bandwidth on Wi-Fi
- \*\* When working with 160MHz clients as compared to a 2x2 AC router that does not support 160MHz
- § Requires compatible Wi-Fi 6 clients with DL-OFDMA and UL-OFDMA support