Discover Wi-Fi

Wi-Fi CERTIFIED 7

Driving the next level of Wi-Fi® performance

Wi-Fi CERTIFIED 7™ is here to meet the growing user demands for immersive, interactive technology. Based on IEEE 802.11be technology, Wi-Fi CERTIFIED 7 enhances Wi-Fi performance in the 2.4 GHz, 5 GHz, and 6 GHz bands, bringing cutting-edge capabilities to enable innovations that require high throughput, lower latency, and greater reliability across home, enterprise, and industrial environments. Key applications supported by Wi-Fi CERTIFIED 7 include augmented, virtual, and extended reality (AR/VR/XR), immersive 3D training, and ultra-high definition video streaming. Wi-Fi CERTIFIED 7 will facilitate worldwide interoperability, a robust device ecosystem, and bring advanced Wi-Fi® performance to the next era of connected devices.

Wi-Fi CERTIFIED 7 networks support advanced Wi-Fi performance for high bandwidth applications to ensure each connected device delivers the dependable experience users expect, even in dense environments like stadiums and large campuses.

Key benefits of Wi-Fi CERTIFIED 7 include:

- Higher throughput
- Improved support for deterministic latency
- Enhanced efficiency, even in dense networks
- Increased robustness and reliability
- Reduced power consumption

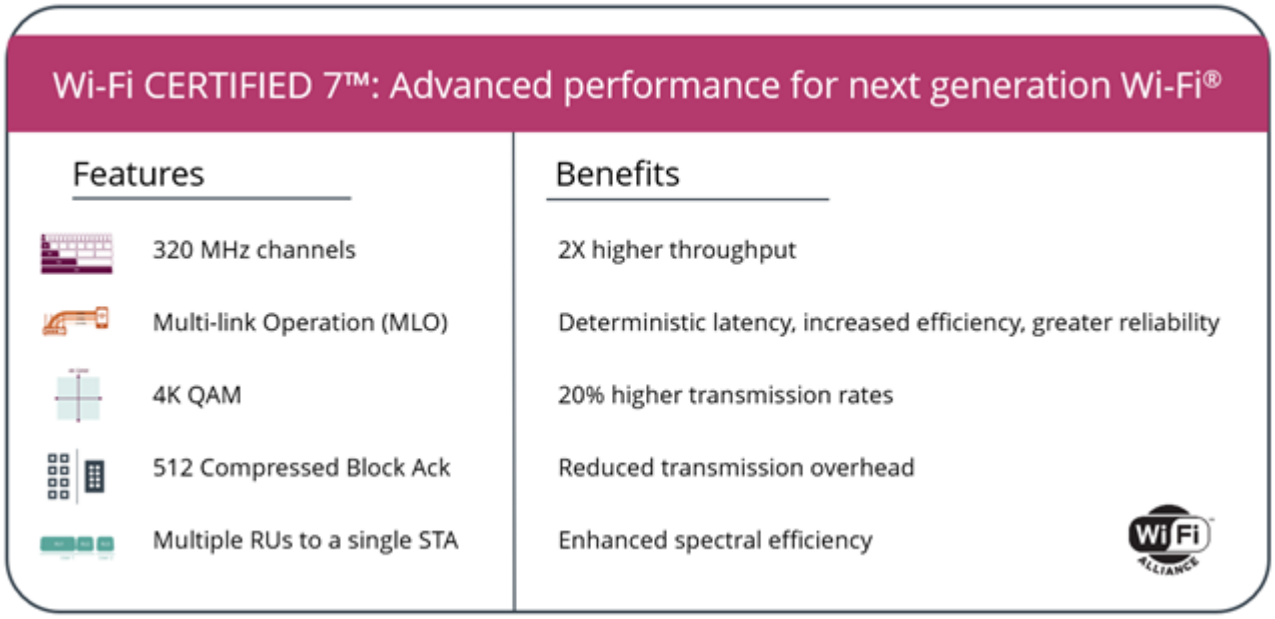
The advanced features of Wi-Fi 7

The key features of Wi-Fi CERTIFIED 7 work together to deliver higher data throughputs and support deterministic latency for sophisticated use cases that demand first-rate reliability. New features include:

- **320 MHz superwide channels** that are only available in 6 GHz provide twice the throughput of **Wi-Fi CERTIFIED**

6®, enabling multigigabit Wi-Fi device speeds

- **Multi-Link Operation (MLO)** supports more efficient load balancing of traffic among links, resulting in increased throughput and enhanced reliability
- **4K QAM** achieves 20% higher transmission rates than Wi-Fi 6's 1024 QAM for greater efficiency
- **512 Compressed Block Ack** improves efficiency and reduces overhead
- **Multiple RUs to a single STA** improves flexibility for spectrum resource scheduling to enhance spectrum efficiency



Wi-Fi CERTIFIED 7 supports superior connectivity for emerging use cases with high levels of interactivity and immersion. As user demand for high capacity, low latency technologies like AR/VR/XR, cloud computing, and Industrial IoT grows across market segments, Wi-Fi CERTIFIED 7 devices will deliver optimized performance in the 2.4 and 5 GHz band, and countries with access to 6 GHz will experience the full scope of Wi-Fi 7's unparalleled performance.

Video

Wi-Fi CERTIFIED 7™: Driving next-level Wi-Fi® performance

Wi-Fi Alliance News

See All

Wi-Fi Alliance® introduces Wi-Fi CERTIFIED 7™

Wi-Fi Alliance® surpasses 80,000 certifications

Wi-Fi Alliance® hosts the first public Wi-Fi 7 demonstration in the Middle East

The Beacon Blog

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25 years of Wi-Fi®: Celebrating today's innovations

Wi-Fi 7 market momentum: Wi-Fi 7 is here – is your network ready?

Wi-Fi 7 market momentum: Driving connectivity across automotive scenarios

The Signal Podcast

See All

Episode 61: Testing, testing: Exploring Wi-Fi 7 for Operators and Service Providers with James Kimery of Spirent Communications

Episode 59: CEO Insights: Wi-Fi Alliance® and Airties

Episode 58: CEO Insights: Wi-Fi Alliance® and CSA

Media Coverage

See All

Wi-Fi 7 Is Here, and There Are 5 Reasons You Should Upgrade Your Router

WHAT IS WI-FI 7?

Blocking 6-GHz Wi-Fi Is Costing Consumers Money and Quality Experiences

Product Finder

Wi-Fi CERTIFIED 7 certified products

Additional Resources

Wi-Fi CERTIFIED 7™ Features Graphics

Wi-Fi CERTIFIED 7™ Highlights

Wi-Fi CERTIFIED 7™ Technology Overview (2024)

Browse All Topics

- 6 GHz Wi-Fi Information Center
- Education
- Enterprise
- Healthcare
- Internet of Things
- Miracast
- Operators
- Passpoint
- Security
- Value of Wi-Fi
- Wi-Fi Agile Multiband
- Wi-Fi Aware
- Wi-Fi CERTIFIED 6
- Wi-Fi CERTIFIED 7
- Wi-Fi CERTIFIED ac
- Wi-Fi CERTIFIED HaLow
- Wi-Fi CERTIFIED n
- Wi-Fi CERTIFIED Voice-Enterprise
- Wi-Fi CERTIFIED WiGig
- Wi-Fi CERTIFIED WMM Programs
- Wi-Fi Data Elements
- Wi-Fi Direct
- Wi-Fi Easy Connect
- Wi-Fi EasyMesh
- Wi-Fi Home Design
- Wi-Fi Location
- Wi-Fi Optimized Connectivity
- Wi-Fi Protected Setup
- Wi-Fi QoS Management
- Wi-Fi Vantage

- **XR**

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