

Advantages of deploying Wi-Fi 7 APs today



With the new Wi-Fi 7 standards having officially kicked off, skipping Wi-Fi 6E and deploying Wi-Fi 7 access points (APs) seems to make the most sense. Wi-Fi 7 APs offer faster speeds, more capacity and better network reliability and stability and fully support existing Wi-Fi 6E clients. Not to mention, only Wi-Fi 7 APs will be able to support the 233 million Wi-Fi 7 devices expected to come online in 2024*.

Five reasons to deploy Wi-Fi 7 APs

Blazing fast network speeds

By utilizing the full potential of the 6 GHz spectrum, Wi-Fi 7 can deliver more than four times the maximum throughput of Wi-Fi 6E. On its best day, Wi-Fi 6E could deliver as much as 9.6 Gbps, while Wi-Fi 7 is rated at 46.1 Gbps.

No more network bottlenecks

Networks can often get bogged down by slow, legacy client devices. But Wi-Fi 7 APs use Multi-Link Operation (MLO) to avoid this. By being able to send transmissions between the 2.4, 5 and 6 GHz bands simultaneously, Wi-Fi 7 APs circumvent network congestion and actually reduce latency.

Fully support existing Wi-Fi 6E clients today

Deploying Wi-Fi 7 APs today is the only future-proof option. Wi-Fi 7 is fully compatible with Wi-Fi 6E, so all the existing Wi-Fi 6E phones, tablets and laptops that have been shipping for the last couple years will be able to connect to Wi-Fi® at 6GHz (at Wi-Fi 6E speed) and as Wi-Fi 7 clients start shipping they will be able to take full advantage of Wi-Fi 7 massive performance improvement.

More robust network reliability

In addition to MTO, Wi-Fi 7 APs can access mega-wide channels (320 MHz) that Wi-Fi 6E can't. Then can also employ Punctured Transmission technology, which mitigates interference by "puncturing out" that used portion of a channel spectrum and optimizes the remaining clean portion of the spectrum. This more efficient use of the wider channels contributes to a more stable and reliable network.

Highest performance for all devices

Not only can Wi-Fi 7 APs allow devices using the 6 GHz band to maximize their performance, they can help legacy devices run more efficiently by clearing up channels through MTO. What's more, Wi-Fi 7 APs can reserve bandwidth for specific types of data transmission through Restricted Target Wake Time (rTWT), which can help extend the battery life of these devices.

Benefits of RUCKUS® Wi-Fi 7 access points

The dawn of the Wi-Fi 7 era ushers in a new wave of possibilities. With its groundbreaking advancements in speed, capacity, latency, and reliability, Wi-Fi 7 has the potential to transform the way we connect and interact with the digital world.

Bandwidth-hungry ultra-high definition video, virtual reality (VR), the internet of things (IoT), and an explosion of new devices and content are all on the horizon. For businesses in industries where customer satisfaction is closely tied to the performance of your Wi-Fi network—like hospitality, education, healthcare, large public venues and multi-dwelling units—migrating to the RUCKUS R770 Wi-Fi 7 indoor AP today prepares your network for what's next.

RUCKUS® R770 indoor access point



This new high-end Wi-Fi 7, tri-band concurrent AP delivers eight spatial streams and supports Wi-Fi 7 features such as Multi-Link Operation (MLO), Preamble Puncturing, 4K QAM Modulation, and 320 MHz channels. It delivers industry-leading performance with a combined data rate of 12.22 Gbps.

Furthermore, a 10 Gbps Ethernet port eliminates wired backhaul bottlenecks for full use of available Wi-Fi capacity. And the R770 features one built-in IoT radio offering onboard Bluetooth® Low Energy or Zigbee® capabilities.

The R770, with built-in RUCKUS exclusive technology, dramatically improves network performance through a combination of patented wireless innovations and learning algorithms that includes:

- Airtime decongestion: Increases average network throughput in heavily congested environments
- Transient client management: Reduces interference traffic from unconnected Wi-Fi devices
- BeamFlex+® adaptive antennas: Extended coverage range and optimized throughput with patented dynamic multi-directional antennas and radio patterns that work with any client.

With RUCKUS Networks being the only commercial vendor to have been selected by the Wi-Fi Alliance® to become part of the Wi-Fi CERTIFIED 7™ test bed, you can rest assured you can trust RUCKUS for all your Wi-Fi 7 needs. To learn more about migrating to RUCKUS Wi-Fi 7 APs, contact your RUCKUS representative today.

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