Wi-Fi Extender FAQ

• Q1: Why you need a Wi-Fi extender? What is the advantage of using a Wi-Fi extender?

A: The advantage of a Wi-Fi extender is extended Wi-Fi coverage, in comparison with Wi-Fi coverage from a router only. **Wi-Fi dead zones can be eliminated**, enabling you to use your wireless devices anywhere in your home or office.

![Diagram showing router's Wi-Fi coverage and extending to dead zone](image-url)
Q2: What’s the best location to place the Wi-Fi extender?
A: The best location to place the Wi-Fi extender is one which is an open space, **roughly in the middle between your router and the Wi-Fi dead zone**, and where the Wi-Fi extender LED displays an “Excellent” signal strength. Please consider that Wi-Fi performance can be affected by environmental factors such as the thickness and proximity of walls, or interference from other devices such as microwaves or wireless telephones, and choose the location of your extender accordingly.

Q3: Does using a Wi-Fi extender affect the performance of my Wi-Fi connection?
A: **Wi-Fi extender will not effect to your original Wi-Fi performance**, but between the Wi-Fi extender and your wireless device, test speed is possible to be reduced in comparison to Wi-Fi performance between a wireless device and your router.

This is a standard limitation of all Wi-Fi extenders, regardless of brand/manufacturer, and is unavoidable due to the nature of Wi-Fi communication systems. Although performance may differ from that of your router, a Wi-Fi extender can still provide Wi-Fi coverage and good wireless performance where there was previously none.
Q4: When connecting to Wi-Fi extender, why sometimes speed is slower than connecting to router?

A: This is Wi-Fi standard specification. Wi-Fi is a “Half-duplex” communication system. “Half-duplex” systems only allow communication in one direction at a time (e.g. walkie talkies), as opposed to “Full-duplex” systems which allow simultaneous communication in both directions (e.g. land-line telephones).

Wi-Fi connections require data to be transmitted back and forth between routers, extenders and clients. The nature of a “Half-duplex” communication system means that essentially, when data has to travel further, it takes longer. Consequently, with the addition of a Wi-Fi extender into a network, performance between the extender and the client is affected. Performance directly between the router and a wireless client though, remains unchanged.
During any one time slot, only one station is able to transmit at a time. **The Wi-Fi extender** functions “Store” and “Forward”. The internet data transmitted and received between the router and client takes 1x of time, but when the data goes to the extender, to the client and back to the router, the path and time is longer.
Q5: Can I use one extender after another extender?
A: Yes, it’s possible but not recommended. Wi-Fi performance will be affected.

Q6: If I am in a location where the signal from the extender and the router are both available, and the signal strength is the same from both devices, which one should I connect to?
A: If the signal strength is the same, we recommend that you connect to your router, and not to the Wi-Fi extender because your router can provide enough performance. **We only recommends you connect to extender when your Wi-Fi device is in the dead zones where connection is very poor or no Wi-Fi signal.**
Q7: What is the meaning of extender’s signal LED?

A: Extender’s signal LED can indicate signal strength between router and extender. We suggest you to place extender by checking signal LED. The best location to place the Wi-Fi extender when extender’s signal LED is steady on.

Recommend Extender Location:
Only extended enough coverage to eliminate dead zones. Do not move extender too far away from router.

- **Excellent**
  - Extender’s signal LED is on which represents an excellent signal & speed.

- **Normal**
  - Significantly extended further coverage but with normal speed.
  - Extender’s signal LED is blinking slowly.

- **Not recommended**
  - Although Wi-Fi coverage is extended by a greater distance, the two signals are barely overlapping, meaning the signal to the extender is weak. The green area will subsequently offer a very poor performance.
  - Extender’s signal LED is fast blinking.
In this scenario, the extender cannot function.

The extender is not within range of the router, and cannot receive a Wi-Fi signal. Extender’s signal LED is off.