Wi-Fi extenders

Description

Stay connected with Wi-Fi extenders

Are there areas in your home where the Wi-Fi signal keeps dropping out? Wi-Fi extenders could be your ideal solution. These devices expand your Wi-Fi coverage, ensuring a stable, consistent connection throughout your entire living space.

Everything you need to know about Wi-Fi extenders

01. What are they and how do they work?

Wi-Fi extenders can improve weak signals caused by obstacles or congestion, providing a convenient solution to extend your routerâ??s reach. They can also help if you simply want to extend your routerâ??s coverage beyond its current range.

Weak wireless signals can result from obstacles like walls or congestion from multiple devices sharing the same signal. Wi-Fi extenders or repeaters can assist by amplifying and extending the wireless signal, providing cost-effective and compact solutions that easily plug into power outlets.

These devices donâ??t need to be the same brand as your primary router, and can assist in diagnosing slow connections by pinpointing whether the issue lies in network or internet problems. The Wi-Fi signal will still become weaker the further the distance away from the original signal device.

- Lifewire: Understanding Wi-Fi and How It Works
- Choice Australia: How to find the best wireless router, Wi-Fi mesh or wireless extender
- TechRadar Australia: Best Wi-Fi extenders of 2023: top devices for boosting your Wi-Fi network
- PC Mag Australia: Wi-Fi Range Extenders

02. What is the speed and range of a wireless extender?

These are the radio bands that wireless signals broadcast over.

- 2.4Ghz. Broader range, more reliable around interference, but slower.

- 5Ghz. Narrower range, has more problems with interference, very fast.

Most extenders have both frequencies built-in to them and will switch between them depending on their own computer intelligence. For example, when viewing your internet connection options in your home you will see both listed. You can tell your extender to use one or the other, in order to test or fix connection issues.

Most home Wi-Fi extenders using the 2.4 GHz band can cover around 45 metres indoors and 100 metres outdoors. A 5GHz connection can have more problems with interference than a 2.4 GHz connection because it uses narrower wavelengths. So, it will usually have a slightly shorter effective range â?? about 3 to 5 metres shorter.

More information: Is 5 GHz Wi-Fi Better Than 2.4 GHz?

Having equipment issues?

Check out our troubleshooting guides

Take me there

Other ways to extend a signal

You can also use different combinations of routers and Wi-Fi extenders to increase your coverage across a much broader section of your property.

01. Mesh routers

While this is essentially a router, it acts like a Wi-Fi extender, but with more computer intelligence and power. One central main wireless router provides the signal, and multiple satellites or nodes take that signal and repeat it wherever you need it. The nodes â??meshâ?• together more seamlessly as theyâ??re all part of the same setup, so the signal they provide is much stronger and more reliable.

This type of setup can broadcast a strong and reliable 5Ghz signal to everywhere you need, supporting uses such as music or video streaming and â??Smart Homeâ?? or Internet of Things (IoT) systems such as Telstra Smart Home or Apple HomeKit. It is also strong enough to send a signal to external buildings or devices on a rural property.

They are more expensive than a Wi-Fi extender, and your service provider may not be able to provide full support for internet connection issues with a mesh system, unless itâ??s one theyâ??ve provided to you.

- Choice Australia: How wireless mesh networks can boost your homeâ??s Wi-Fi signal

- Choice Australia: Wireless mesh network reviews
- TechRadar: The best mesh Wi-Fi systems in Australia for 2023: top mesh routers
- PCMag Australia: Wi-Fi Mesh Networking Systems

02. Access points

Access points are similar to mesh routers but have a key difference: they connect to the network via a cable. They get both data and power from a single internet cable using an adapter or compatible switch.

Access points tend to be more reliable than mesh routers or Wi-Fi extenders. Mesh routers and extenders act like individual antennas, amplifying the existing signal. The further away your device, the less quality you will have.

An access point creates a new signal by establishing a fresh data connection. So, at each access point, you get a new signal, but itâ??s as strong as the original one, ensuring consistent quality throughout the network.

03. Point to point connections (Wi-Fi Bridge)

These are also called â??wireless bridgeâ?• or â??Wi-Fi bridgeâ?• systems. They broadcast a local internet connection over larger distances using matched antennas and equipment at both the sending and receiving end.

The antennas must have an uninterrupted line of sight to each other, without obstructions from things like hills or vegetation. Where conditions are suitable, this setup can give you an internet connection from your main building on a property to outlying buildings and locations across the rest of the property.

Point to Point connection antenna on a pole mount holding a Fixed Wireless antenna.

We make sure our values are reflected in our work

Free And Independent Advice

The Regional Tech Hub is funded by the Australian Government, ensuring the advice we provide to you is free. We also remain independent, so the options and information we put forward are all assessed equally.

Regional Support

We believe all Australians, no matter where they live, should be able to access affordable and reliable internet and voice services. Our team are all regionally-based and understand the challenges regional, rural, and remote residents face.

Keeping it Easy

Regional Tech Hub understands the jargon used around connectivity options and issues can be frustrating and confusing. You can relax knowing our resources and advice are accurate, straightforward and practical.

Clear Processes

We offer various contact options and service levels to suit your needs, ensuring you stay informed and on board throughout every step of your connectivity journey. We strive to make every interaction clear, easy and stress-free.

Couldnâ??t find what you were after? Give us a call!

Chat to us on our hotline with one of our team members and letâ??s get the conversation started. If we donâ??t answer, weâ??ll get back to you in no time at all.

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