

Wi-Fi, routers & broadband | Medium | 2 min read

Wi-Fi extenders, mesh and powerline explained

If your Wi-Fi does not reach every room, there are three common fixes. Each works differently, and the right one depends on your home.

Wi-Fi extenders

An extender picks up your existing Wi-Fi and repeats it. They are cheap and easy to fit, but they usually cut the speed of the repeated signal and often create a second network name. They work best in a small gap where the router signal is still reasonably strong.

Mesh Wi-Fi

A mesh system uses a main unit plus one or more satellites that work together as a single network with one name. Your phone moves between them automatically. Mesh costs more, but it usually gives the most even coverage in larger or awkwardly shaped homes. Some providers, such as BT, Sky and Virgin Media, offer their own add-on units, so check what yours supports.

Powerline adapters

These send the internet signal through your house's electrical wiring. You plug one in beside the router, connect it with a network cable, then plug another into a socket in a distant room. That second adapter can give you a cable socket or its own Wi-Fi. They are handy for outbuildings or thick walls, but results depend on the age and quality of your wiring.

Which should I choose?

- Small gap in coverage: an extender may be enough.
- Large home or several floors: mesh is usually best.
- Thick walls, or a home office far away: powerline, or a long network cable if you can run one.
- Gaming or video calls: a cable to the room beats any wireless option.

Tips for any of them

1. Place extenders or satellites halfway between the router and the weak area, not in the weak area itself.
2. Plug powerline adapters straight into the wall, not into extension leads.
3. Keep their software up to date, as updates fix security problems.

When to get more help

If you are unsure which option suits your home, or a new system will not connect properly, we can help you choose and set it up.

Still stuck? Email admin@visiontech336.com and tell us what you can see on the screen. Menus and button names can differ slightly between versions and makes. If something does not match, stop and ask rather than guess. Please never send passwords or card details.