![wightfibre — because we care logo]

A Different Kind of Broadband • Full-fibre • Ultrafast • Future-proof

A Technical Guide to
the WightFibre Home WiFi

WightFibre Home WiFi White Paper

This White Paper describes WightFibre's Home WiFi service powered by Plume.

Firstly, let's make sure that we know the difference between WiFi and Broadband. Most Internet Service Providers (ISPs) provide a box that does both functions in the form of a "router", so this can confuse things. Broadband is what connects the router to the Internet. WiFi is what connects your devices around the house to the router and which then routes to the Internet (in your home).

WightFibre's "Whole Home WiFi" powered by Plume is the solution that brings you a WiFi solution throughout your whole home to match the Ultrafast speeds you get with a WightFibre broadband connection. It's one thing getting fast broadband to your door, but how do you get the best performance all around your house? This White Paper focuses on the WiFi part of the journey.

In Brief

WightFibre provides a selection of brilliant broadband packages which many other Internet providers can only dream of with speeds from 100Mbits to 900Mbits, however the story doesn't end there if you can't get the very best WiFi signal to the furthest reaches of your home.

If you are having problems with buffering whilst streaming Films and TV, inconsistent speeds and lag on multiplayer online games it may well be your WiFi, not the broadband.

This is where WightFibre's Home WiFi comes in using the very latest adaptive wireless technology as well as many value-added features including guest access controls, cyber security, parental controls and even home security, all controllable from the Plume HomePass App.

WightFibre have carefully developed their WiFi routers and additional pods to work with the WightFibre full-fibre network and also support the latest "WiFi-6" technology meaning they are Ultrafast and future-proof.

If you want to know more read on...

Things have changed a great deal since the early days of broadband with just a few devices in the house and the main PC probably still connected by cable to the broadband router. Now many households have dozens of devices including PCs and laptops, game consoles, smart phones, tablets and also a growing number of smart devices including TVs, streaming dongles and voice assistants. Add to this WiFi enabled light bulbs, doorbells, security cameras and the average number of devices connected in a household is constantly rising. On WightFibre's network the average number devices connected per household is 14 and around 500 Island homes have 59 or more devices. Having a single WiFi router combined with the broadband router simply doesn't cut it anymore.

Sorting out Poor WiFi

A common approach many people take to try to deal with poor WiFi in some parts of the house is to use low-cost range extenders (£20-£50 each). These work by receiving the WiFi signal and retransmitting it. An important thing to know about these is that they normally halve the throughput of your WiFi as they typically only afforded a single radio inside and have to use half of the bandwidth for the extra hop from the router - this didn't used to be much of a problem when good WiFi speeds were several times good broadband speeds, as the WiFi would almost always be faster than the broadband but with Ultrafast full-fibre broadband available from WightFibre the broadband will be faster than the WiFi. The other weakness of these devices was that they were basically dumb and often could only address the issue in a small part of the home.

The next logical improvement on WiFi extenders is to use a "mesh" based system. There are quite a few mesh systems available either independently from manufacturers like Google, Linksys, Netgear, or from ISPs. In a mesh system you put a few devices or "nodes" around the house and they "mesh together". Buying these systems can be quite expensive as they typically come in packs of two or three nodes and very often cost £100-£150 per extender.

WightFibre's solution goes above and beyond the capability of a basic mesh system by using Adaptive Technology from Plume.

WightFibre's Whole Home Adaptive WiFi from Plume

WightFibre's Whole Home WiFi is powered by Plume, directly on the router that is provided, or via the additional SuperPods which plug easily and discretely into any normal three pin mains socket around the house. They act together to create a "plume" of WiFi in your home meaning it reaches the furthest parts and means all devices can easily connect.

What's more, unlike most of the competition, the WightFibre system is adaptive and is constantly using artificial intelligence to optimise the Quality of Experience (QoE):
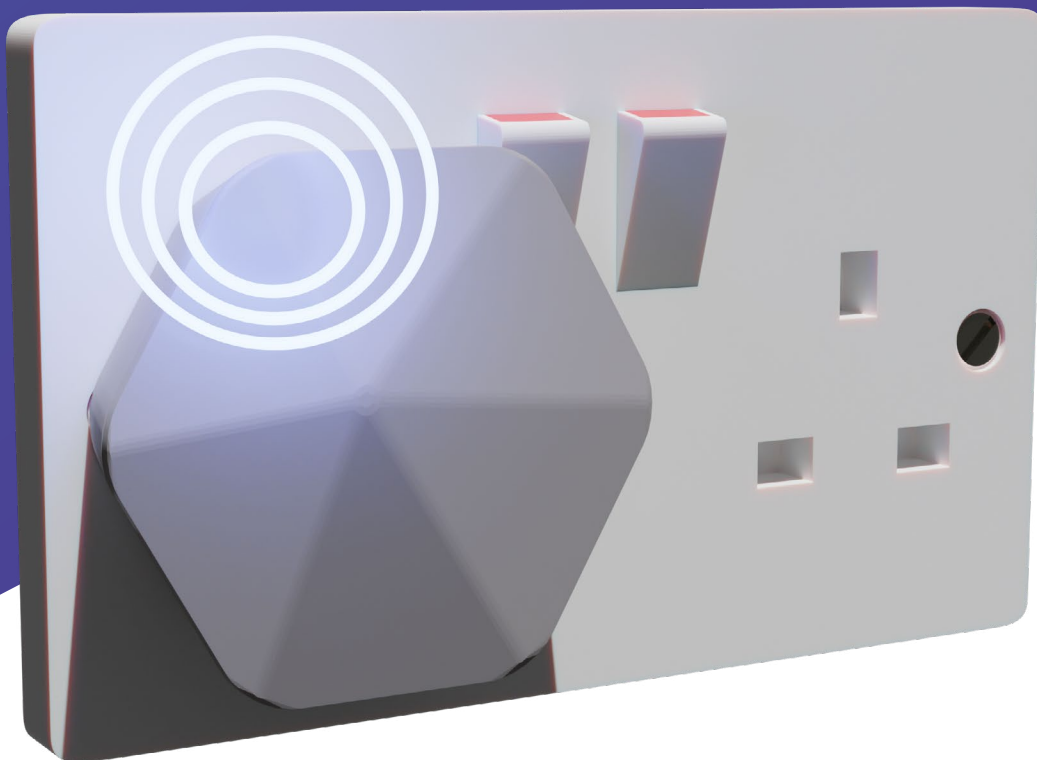
plume

/plüm/

a long cloud of vapour resembling a feather as it spreads from its point of origin.

- It automatically looks for the best WiFi channels to use reducing interference and ensuring the best signal and increasing capacity.

- It looks at the kind of devices connected to it and the type of traffic they are sending to make sure they are getting the priority they deserve to ensure seamless use and peak efficiency.

- When there is more than one pod or 'node' for Whole Home WiFi, devices are steered to use the SuperPod with the best signal and makes use of "fast device handoff" to make sure devices connect to the best pod when you move around the house (rather than staying connected to a distant pod)

- By spreading multiple Plume SuperPods around the house provides multiple paths ensuring that the system can always find the most optimum path

- Using the latest 'WiFi 6' standard (IEEE 802.11ax), the Plume SuperPods are futureproofed and can carry up to three times the data of old 'WiFi 5'.
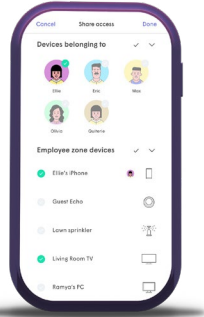
Using the HomePass App, you can easily keep an eye on the speed of your connection and all the devices which are connected, how much data they are using and what quality of signal they have.

Guest Access Control

Most people are familiar with guest hotspots found in cafes and hotels, but now you can have guest access for your own home as well so you can easily give internet access to your friends when they come round. However, it doesn't stop there – most WiFi hotspots stop other devices seeing others on the network as a security precaution however with Access controls you can also allow guests to connect to other devices that you choose on the network, not just the internet, so that for example a friend could connect to your printer, or you can share your Sonos sound system with guests.
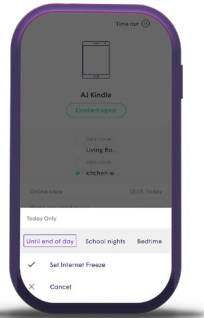
Using the Plume HomePass App, you choose who can connect and to what in a matter of moments.

Parental Controls

Plume Homepass comes complete with Child, Teen and Adult configurations for your WightFibre Whole Home WiFi enabling you to screen internet activity and set content filters. You can also set screen time limits with scheduled internet freezes and temporary time-outs, and these settings can be combined across all the devices normally used by particular people.
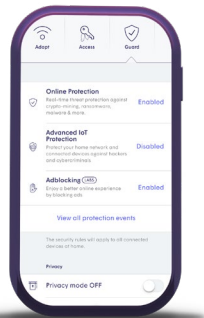
All of this can be done in moments from the Plume HomePass App.

Cyber Security

WightFibre Whole Home WiFi applies security at the network level and monitors all devices for suspicious traffic. One of the great things about managing security at a network level is that even devices which don't tend to have anti-virus software and firewalls on them, especially mobile phones, tablets and new "Internet of Things" devices like voice assistants and doorbells can be automatically and continually monitored to see if they are sending out any malicious data, as well as for devices visiting suspicious sites, for example in response to a phishing attempt.
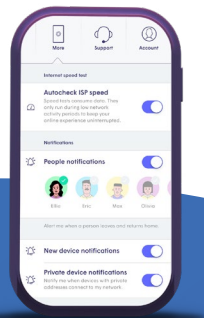
The system can automatically block and warn you of these threats through the Plume Homepass App.

Physical In-Home Safety & Security

WightFibre Home WiFi is smart enough to know who's at home (based normally on whose mobile phones are present), but more than that can detect "disturbances in the Force", OK not THAT Force, but disturbances in the WiFi signal between SuperPods and any other fixed WiFi device in your home.

Using the HomePass App, you choose to get push notifications not only when for example a child arrives back home but also when any unusual activity takes place that might suggest an intrusion.

✓ In Conclusion

WightFibre's Whole Home WiFi is fast and future-proof and ideally complements the Ultrafast broadband available through your WightFibre broadband connection, ensuring your internet access isn't compromised by an old, underperforming WiFi system.

HomePass powered by Plume is included with all of WightFibre's residential broadband packages and provides premium features including the guest access levels, parental controls and cyber security as standard. The top packages include Whole Home WiFi provision for multiple Plume SuperPods to reach every corner of the property and adds adaptive WiFi to keep things running smoothly to ensure every device is running to its full potential.