

This is a slightly edited version of a recent article in Which? (by their kind permission). I have edited it slightly to make it more relevant to us in Kilmeston, Cheriton and Bramdean and I have added some notes in **red**. You can read the full article at <https://www.which.co.uk/reviews/broadband/article/the-benefits-of-fibre-broadband-gigabit-aBQ199p7pITR>

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## The benefits of fibre broadband

Superfast, ultrafast, gigabit - faster fibre connections are becoming cheaper and more widely available. So is it worth upgrading?

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Fibre is increasingly becoming the first choice for people seeking a new broadband connection. It makes sense - fibre broadband is not only faster than standard (ADSL) broadband but more reliable too. But there isn't just one type of fibre, and the speeds available can vary significantly.

Read on to learn more about the different types of fibre - including the new speedy 'full-fibre' connections that are becoming increasingly available - and weigh up the potential benefits.

## Types of fibre broadband – superfast, ultrafast and gigabit

There are several different types of fibre broadband and the terminology can quickly get confusing. Here are the key terms it's useful to understand when exploring fibre broadband options.

### Standard broadband

This is used to describe the old-school ADSL broadband that is provided using the UK's phone network. It tops out at 24Mbps, although many with standard broadband will find their speed much lower than this, particularly if they're in a rural area. **This is what you have if you HAVEN'T taken CallFlow's 'fibre to the cabinet' service. You'll be lucky to get more than about 6Mbps.**

## 'Partial fibre' vs 'full fibre' (FTTC vs FTTP)

Most of the connections we currently refer to as 'fibre' broadband in the UK are more accurately called 'partial fibre' - while fibre optic cables make up most of the network, copper wiring is used from a street cabinet into the home. This is why partial fibre is also called 'fibre to the cabinet' (FTTC). The copper section of the network slows the signal down, reducing the maximum speed to 80Mbps. This is CallFlow's service although you won't be getting 80Mbps even if you're right on top of the cabinet. You may get around 20Mbps, but reliability has been an issue, probably because of the poor condition of the copper wires that bring the signal from the cabinet to your house.

But more and more 'full fibre' connections are becoming available. These rely entirely on fibre optic cables so are sometimes called 'fibre to the premises'. Full fibre offers the fastest speeds - it's possible to see speeds exceeding 1,000Mbps (1Gps). This is FTTP and is what we are applying for through the "Gigabit Broadband Voucher Scheme".

## Superfast

This generally refers to any connection that is 24Mbps or faster. Superfast connections are available to 96% of homes in the UK. But not here, unless you are able to receive the 4G signal from one of the local mobile phone masts.

Most of the popular providers offer deals with average speeds ranging from 36Mbps to 67Mbps - these are all superfast. (Again, not here).

## **Ultrafast**

There are varying definitions for ultrafast broadband. The UK government definition - and the one we use - is broadband that is 100Mbps or faster.

Ultrafast is speedier than a lot of the widely available 'fibre' deals on offer via providers like BT, Sky and TalkTalk that use the Openreach network.

Meanwhile Virgin Media focuses on ultrafast broadband, offering deals with speeds of 108-516Mbps. The Openreach network also offers ultrafast, but only in certain locations.

## **Gigabit or 'gigabit-capable'**

This refers to broadband connections with speeds of over 1,000Mbps - also known as 1Gbps. Gigabit-capable broadband is available to nearly one in four British households, usually via full-fibre networks.



## What is gigabit broadband?

Gigabit broadband simply refers to connections with speeds of one gigabit per second (1Gbps, ie 1,000Mbps) or faster. They're the fastest connections out there right now - around fifteen times faster than the average broadband speed in the UK (this was 64Mbps in 2020).

Fast download speeds make life a lot easier if you have a lot of people using your connection at the same time. But that's not the only benefit: gigabit connections are also more reliable. They're less susceptible to interference than connections that use copper wiring, and they're resilient over long distances.

Gigabit connections also offer faster upload speeds, making them a strong choice for fans of online gaming and people who work from home, as higher upload speeds make video calls and sharing large files much easier.

Gigabit broadband connections aren't yet widely available in the UK, however - only just over a quarter of properties have access to a gigabit-capable connection. **They will be available here if we get FTTP, which is why the Government's funding offer is called the "Gigabit Broadband Voucher Scheme" and marketed through "Project Gigabit".**

## **How Which? is leading on gigabit adoption in the UK**

The government's ambition is for at least 85% of the UK to have access to gigabit-capable broadband by 2025. The government has also committed £5bn to connect the hardest-to-reach parts of the UK.

However, alongside the supply of these connections, there needs to be a demand for them. This will help ensure that the benefits of these better-quality connections can be realised. That's why, in August 2020, the government asked Which? to convene and chair the Gigabit Take-up Advisory Group (GigaTAG).

Working alongside the Confederation of British Industry (CBI) and Federation of Small Business (FSB) we have brought together representatives from government, the telecoms regulator and industry, to put forward recommendations of how to encourage migration to gigabit-capable networks and the adoption of gigabit-capable services (where consumers and businesses can benefit from them) as soon as possible.



## Can I get fibre broadband?

It's highly likely. Superfast fibre broadband with speeds of at least 30Mbps is available to 96% of premises in the UK. **FTTC is available here now through CallFlow but see above.**

There's a chance fibre broadband won't be available if you live in a rural area, particularly in parts of Northern Ireland, although 3-5% of homes in England, Scotland and Wales also cannot yet access superfast broadband.

Ultrafast fibre (speeds of 100Mbps or more) is available to nearly two thirds of customers in the UK - this is often via alternative networks such as those operated by Virgin Media and Hyperoptic.

Gigabit connections (speeds of at 1Gbps/1,000Mbps) are also available to nearly one in four households. The best availability is currently in Northern Ireland but it is growing each year throughout the UK.

Use Which? Switch Broadband to [compare the deals available where you live](#) - and how much they cost.



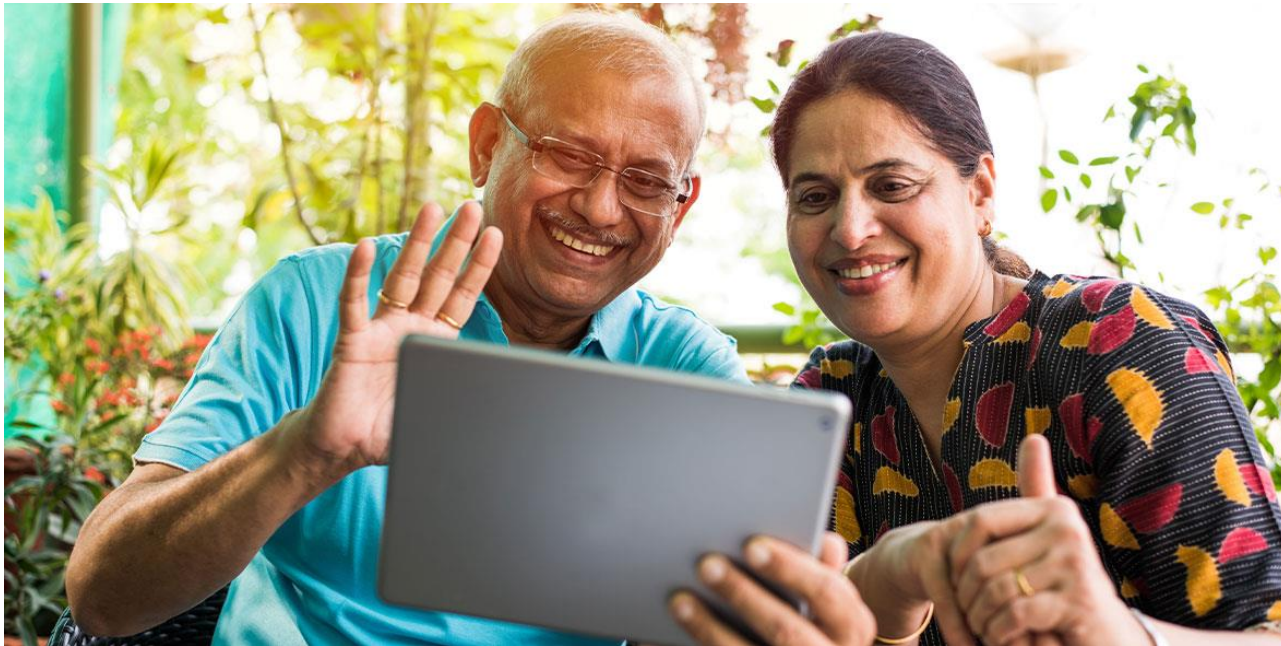
## Is it easy to switch to fibre broadband?

Yes (but you're very unlikely to get superfast speeds until we get FTTP) - it's a simple case of either contacting your provider to upgrade, or selecting a fibre broadband deal with a new provider. Even switching providers is



straightforward. In the majority of cases, you'll only have to contact one provider and they will organise the switch for you (but in this area, CallFlow is the only provider to offer FTTC).

We've broken the process for switching providers down into four steps. Find out more in our guide on [how to switch broadband provider](#).



# Does fibre broadband offer faster speeds?

Pretty simply, yes. The widely available partial fibre (**FTTC**) deals offer average speeds ranging from 30Mbps up to 512Mbps (**but again, not here owing to the copper phone network on which they rely**). This is in comparison to standard (ADSL) broadband where the absolute best speed you'll see is 24Mbps, although it's usually 10-11Mbps in reality.

Full fibre deals can be even faster - as speedy as 1Gbps (1,000Mbps).

Not sure what speed you're currently on? Use our [broadband speed test](#) to find out.

## Benefits of faster broadband speeds

- **Higher-quality video and audio streaming** Platforms like YouTube and Netflix will often auto-adjust their streaming quality based on the connection speed.
- **Smoother video calls** These involve your connection sending and receiving data simultaneously. Higher upload and download speeds lead to better video and audio quality and fewer dropouts.
- **More devices can be connected at once.** Faster connections support more devices being used simultaneously - handy if you have a large family.
- **You can speedily download large files** For example, while it would take the average standard broadband connection more than 10 minutes to download a film, the slowest ultrafast connection would do it in a little over a minute, while gigabit broadband could do it in less than 10 seconds.



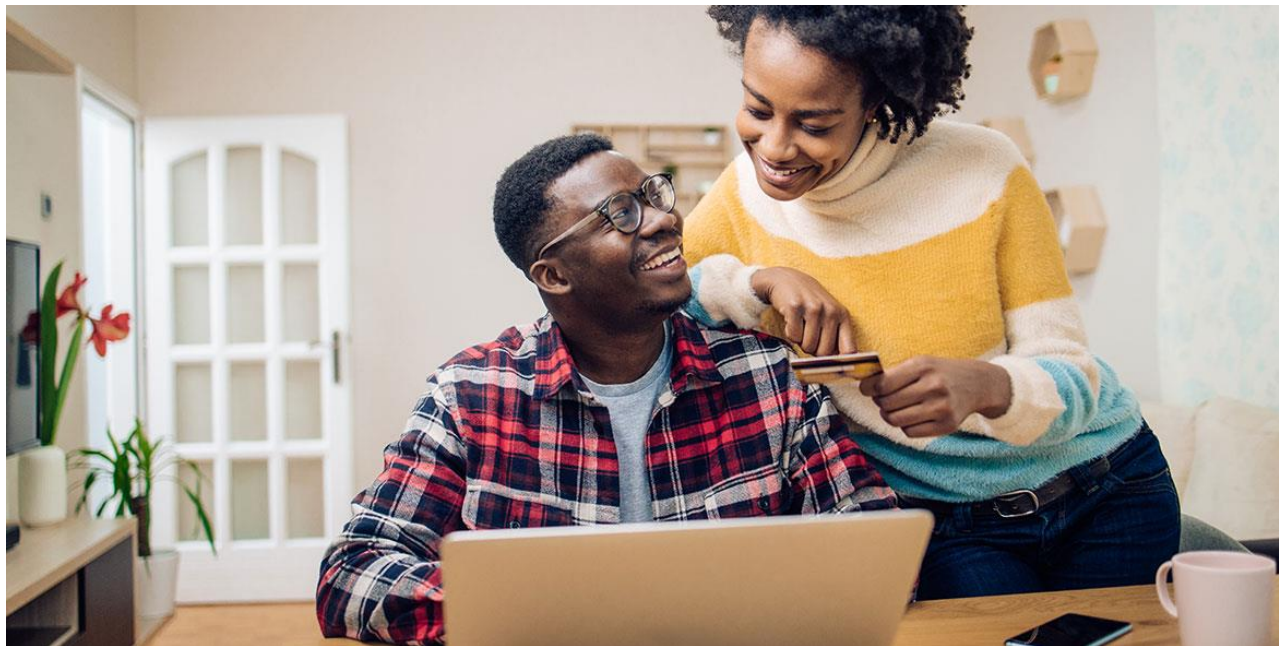
## Is fibre broadband more reliable?

This is a major benefit. As well as being faster, broadband delivered via fibre optic cable is less prone to dropouts or interference.

Standard broadband uses the UK's copper phone network. Extreme weather can interfere with the electrical signals and the longer the line, the slower the speed at the end of it. People in rural areas often find their standard broadband speeds very slow for this reason. **Even if you take CallFlow, the signal comes from the cabinet to your house via the copper phone network, which is why it's slow.**

When we surveyed more than 3,000 broadband customers who had upgraded to a fibre connection from a slower standard broadband connection, the majority said they'd noticed an improvement. Many noted their connections were more reliable as well as speedier:

- 63% noticed faster speeds
- 50% noticed faster downloads and uploads
- 45% noticed fewer connection dropouts
- 43% noticed smoother music or video streaming
- 36% noticed fewer long outages



# How much does fibre broadband cost?

Fibre broadband deal prices have become increasingly competitive. We typically find that superfast fibre deals cost the same as - and often less than - standard broadband. Expect to pay anywhere from £20 to £30 a month while in-contract.

Faster fibre deals - ultrafast deals with speeds over 100Mbps or the speedier gigabit broadband - tend to be a bit pricier. These usually cost around £40 a month or a little more, although you may come across deals closer to £30.

Several big providers, including BT and Vodafone, no longer advertise standard broadband deals, though BT will provide it to those in areas where faster speeds aren't available.

Keep in mind that out-of-contract customers will generally pay more for their deal across the board - we've found that prices can increase by as much as 90% when you move from an affordable introductory offer to an out-of-contract tariff. If you're an out-of-contract customer with standard broadband, you will almost certainly be able to find a cheaper deal that includes fibre.

Compare the different fibre deals on offer from the UK's major providers using our [broadband reviews](#).