This press release gives the aggregated speed test results from the hundreds of thousands of tests carried out by users of broadband.co.uk during December 2020.

Fixed line home broadband providers

Avera	Average fixed line download & upload speeds (Mbps) – December 2020						
Rank	Was	Broadband Provider	Average	Download	Average Upload		
nalik			Speed	Change	Speed	Change	
-	-	All home broadband	47.32	+1.09	10.77	+0.43	
1	1	Virgin Media	103.87	+5.97	14.53	+0.83	
2 🛦	3	Vodafone Home	44.56	+1.99	14.7	+2.1	
3 ▼	2	BT	43.2	+0.26	10.48	-0.1	
4 🔺	6	Sky / NOW Broadband	29.88	+1.56	7.75	+0.53	
5 ▲	7	TalkTalk	28.75	+2.11	7.01	+0.67	
6 ▼	5	EE Home	27.19	-1.68	6.64	-0.06	
7 ▼	4	Daisy / SSE	26.52	-6.95	11.84	-10.13	
8	8	Plusnet / John Lewis	23.6	-0.19	5.72	-0.04	

Overall, the average download speeds across all fixed line providers increased by 1.09Mbps to 47.32Mbps since last month, with upload speeds increasing by 0.42Mbps to 10.77Mbps.

Consumer mobile broadband providers

Aver	Average mobile download & upload speeds (Mbps) – December 2020						
Rank	Was	Broadband Provider	Average Download		Average Upload		
nalik	was	Bioaubaliu Pioviuei	Speed	Change	Speed	Change	
-	-	All mobile broadband	31.56	+3.35	7.61	+0.77	
1	1	EE Mobile	38.11	-0.45	9.56	+1.43	
2 🛦	3	Three Mobile	27.84	+5.86	5.56	-0.12	
3 ▼	2	Vodafone Mobile	27.49	+1.8	7.13	+0.53	
4	4	O2 Mobile	17.57	+1.2	3.86	-0.15	

Overall, the average download speeds across all mobile broadband providers increased by 3.35Mbps to 31.56Mbps since last month, with upload speeds increasing by 0.77Mbps to 7.61Mbps.



Combined home and mobile broadband rankings

Average broadband download & upload speeds (Mbps) – December 2020						
Rank	Was	Droodbond Drovider	Average Download		Average Upload	
nalik	was	Broadband Provider	Speed	Change	Speed	Change
-	-	All home broadband	47.32	+1.09	10.77	+0.43
-	-	All mobile broadband	31.56	+3.35	7.61	+0.77
1	1	Virgin Media	103.87	+5.97	14.53	+0.83
2 🛦	3	Vodafone Home	44.56	+1.99	14.7	+2.1
3 ▼	2	BT	43.2	+0.26	10.48	-0.1
4	4	EE Mobile	38.11	-0.45	9.56	+1.43
5 🔺	7	Sky / NOW Broadband	29.88	+1.56	7.75	+0.53
6 ▲	8	TalkTalk	28.75	+2.11	7.01	+0.67
7 🔺	11	Three Mobile	27.84	+5.86	5.56	-0.12
8 🔺	9	Vodafone Mobile	27.49	+1.8	7.13	+0.53
9 ▼	6	EE Home	27.19	-1.68	6.64	-0.06
10 ▼	5	Daisy / SSE	26.52	-6.95	11.84	-10.13
11 ▼	10	Plusnet / John Lewis	23.6	-0.19	5.72	-0.04
12	12	O2 Mobile	17.57	+1.2	3.86	-0.15

Overall speed performance of consumer mobile broadband is roughly comparable to that of many fixed line broadband providers. However, only 6.96% of the speed tests performed in December 2020 took place over a mobile broadband connection.

While the availability of the fastest mobile data transfer protocols varies with location, and some tests will be performed on 3G or even 2.5G GPRS connections, the same is true for fixed line broadband providers whose flagship products may not be available in rural and remote areas, or may not be adopted by consumers prefering cheaper speed-limited alternatives.



Combined UK broadband rankings by upload speed

Avera	Average broadband upload & download speeds (Mbps) – December 2020						
Rank	Was	Broadband Provider	Average Upload		Average Download		
nalik	vvas		Speed	Change	Speed	Change	
-	-	All home broadband	10.77	+0.43	47.32	+1.09	
-	-	All mobile broadband	7.61	+0.77	31.56	+3.35	
1 🛦	3	Vodafone Home	14.7	+2.1	44.56	+1.99	
2	2	Virgin Media	14.53	+0.83	103.87	+5.97	
3 ▼	1	Daisy / SSE	11.84	-10.13	26.52	-6.95	
4	4	BT	10.48	-0.1	43.2	+0.26	
5	5	EE Mobile	9.56	+1.43	38.11	-0.45	
6	6	Sky / NOW Broadband	7.75	+0.53	29.88	+1.56	
7 🔺	8	Vodafone Mobile	7.13	+0.53	27.49	+1.8	
8 🔺	9	TalkTalk	7.01	+0.67	28.75	+2.11	
9 ▼	7	EE Home	6.64	-0.06	27.19	-1.68	
10	10	Plusnet / John Lewis	5.72	-0.04	23.6	-0.19	
11	11	Three Mobile	5.56	-0.12	27.84	+5.86	
12	12	O2 Mobile	3.86	-0.15	17.57	+1.2	

While most UK broadband providers place much less marketing emphasis on upload speeds, this is an increasingly important factor in broadband satisfaction. As more and more storage moves to the cloud, being unable to quickly save or sync to servers on the internet increasingly impacts the user experience in apps. This is even more important to those who work from home, or who create online video content.

In December 2020 average fixed line broadband download speed was 4.4 times faster than upload speed, while mobile broadband downloads averaged at 4.15 times the speed achieved for mobile uploads.

The rollout and increasing adoption of full fibre broadband services will see the gap between download and upload performance shrink, especially from providers offering symmetric services.



Consumer broadband download speeds - time of day

Average download speeds (Mbps) split by time of day – December 2020						
Broadband Provider	Overnight (00:00 to 07:59)	Daytime (08:00 to 17:59)	Evening (18:00 to 23:59)	Overall (00:00 to 23:59)		
All home broadband	52.17	46.92	46.87	47.32		
All mobile broadband	46.2	31.12	27.39	31.56		
Virgin Media	121.11	103.37	100.5	103.87		
Vodafone Home	56.58	45.83	39.67	44.56		
BT	45.13	42.89	43.4	43.2		
EE Mobile	60.3	37.47	32.1	38.11		
Sky / NOW Broadband	27.83	29.89	30.34	29.88		
TalkTalk	33.75	28.54	27.68	28.75		
Three Mobile	35	26.69	27.28	27.84		
EE Home	28.42	28	25.47	27.19		
Plusnet / John Lewis	24.4	23.37	23.88	23.6		

Our average speed by time of day report shows how the average broadband speed is heavily influenced by the time of day (and therefore likely level of network congestion).

Fixed line broadband advertised speeds are now based on the speed achieved by 50% of customers during peak evening hours of 8pm to 10pm.



Supplemental UK broadband providers

Average download & upload speeds (Mbps) – December 2020					
Broadband Provider	Average Download	Average Upload			
TalkTalk Business	27.33	6.47			
Zen	69.38	15.44			
Post Office (rural/remote)	17.18	3.7			
Gigaclear	108.8	97.65			
Vodafone Wholesale	23.57	7.11			
Hyperoptic	123.96	78.97			
Virgin Media Business	97.97	17.82			
Fibrus	64.11	39.74			
Community Fibre	153.16	110.33			
KCOM	111.34	23.2			
OFNL	67.39	20.84			

Here we list additional fixed line broadband providers with fewer customers making use of our speed test. All providers listed have sufficient test numbers across the month to make average speeds statistically significant, but not enough tests to be split by time of day. The lower down the list, the less confident we are about the overall accuracy of the average results.

It should be noted that some of these supplemental ISPs, such as Zen, primarily supply broadband to the business market, and so may utilize technologies not available to the vast majority of home broadband users.



Expanded UK broadband download speed rankings

Ave	Average download & upload speeds (Mbps) – December 2020					
Rank	Broadband Provider	Average Download	Average Upload			
1	Community Fibre	153.16	110.33			
2	Hyperoptic	123.96	78.97			
3	KCOM	111.34	23.2			
4	Gigaclear	108.8	97.65			
5	Virgin Media	103.87	14.53			
6	Virgin Media Business	97.97	17.82			
7	Zen	69.38	15.44			
8	OFNL	67.39	20.84			
9	Fibrus	64.11	39.74			
10	Vodafone Home	44.56	14.7			
11	BT	43.2	10.48			
12	EE Mobile	38.11	9.56			
13	Sky / NOW Broadband	29.88	7.75			
14	TalkTalk	28.75	7.01			
15	Three Mobile	27.84	5.56			
16	Vodafone Mobile	27.49	7.13			
17	TalkTalk Business	27.33	6.47			
18	EE Home	27.19	6.64			
19	Daisy / SSE	26.52	11.84			
20	Plusnet / John Lewis	23.6	5.72			
21	Vodafone Wholesale	23.57	7.11			
22	O2 Mobile	17.57	3.86			
23	Post Office (rural/remote)	17.18	3.7			



Expanded UK broadband upload speed rankings

Ave	Average upload & download speeds (Mbps) – December 2020				
Rank	Broadband Provider	Average Upload	Average Download		
1	Community Fibre	110.33	153.16		
2	Gigaclear	97.65	108.8		
3	Hyperoptic	78.97	123.96		
4	Fibrus	39.74	64.11		
5	KCOM	23.2	111.34		
6	OFNL	20.84	67.39		
7	Virgin Media Business	17.82	97.97		
8	Zen	15.44	69.38		
9	Vodafone Home	14.7	44.56		
10	Virgin Media	14.53	103.87		
11	Daisy / SSE	11.84	26.52		
12	BT	10.48	43.2		
13	EE Mobile	9.56	38.11		
14	Sky / NOW Broadband	7.75	29.88		
15	Vodafone Mobile	7.13	27.49		
16	Vodafone Wholesale	7.11	23.57		
17	TalkTalk	7.01	28.75		
18	EE Home	6.64	27.19		
19	TalkTalk Business	6.47	27.33		
20	Plusnet / John Lewis	5.72	23.6		
21	Three Mobile	5.56	27.84		
22	O2 Mobile	3.86	17.57		
23	Post Office (rural/remote)	3.7	17.18		



About the Broadband.co.uk speed test results

- Our results are taken from our website users performing speed tests using our speed checker at https://www.broadband.co.uk/broadband-speedtest/
- We record hundreds of thousands of speed tests every month
- Unlike other speed test services we record the Internet Service Provider (ISP) by IP address making our ISP recording very accurate rather than relying on self selection.
 Certain ISPs resell their services as a wholesale or white label product, in these cases the wholesale ISP is matched
- We pick out the following 'big 8' fixed line ISPs for detailed reporting every month:
 - BT wholesale network (used by several suppliers outside their own low cost network areas)
 - Daisy wholesale network (used by SSE and Fleur)
 - **EE** (excluding 4G mobile broadband)
 - Plusnet wholesale network (used by John Lewis)
 - Sky (also sold as NOW Broadband)
 - TalkTalk wholesale network (used by suppliers such as Utility Warehouse, Post Office Broadband and First Utility)
 - Virgin Media
 - Vodafone
- As our test is one of the few that will run on mobile devices and tablets, we're also able to report on the following mobile broadband networks:
 - **EE** (used by Virgin Mobile, Plusnet Mobile, Asda Mobile and Phone Co-Op)
 - O2 (used by Tesco Mobile, Sky Mobile, TalkTalk Mobile and giffgaff)
 - Three (used by Superdrug Mobile, TPO Mobile and FreedomPop)
 - Vodafone (used by Talkmobile)

About Broadband.co.uk

- Our broadband price comparison is accredited by Ofcom as open, honest and transparent
- We are one of the original broadband information and comparison sites having been launched in 2004
- With millions of visitors each year we are one of the UK's leading sources of broadband information and advice
- We provide beginners guides to all areas of broadband along with detailed buyers guides to the major broadband providers, speed tester and broadband postcode lookup functionality
- We provide a free advice service where our broadband expert answers queries related to broadband, technical, comparison and related

For more information contact Fiona Conner via email at press@broadband.co.uk