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 2021.

#### Fixed line home broadband providers

Avera	Average fixed line download & upload speeds (Mbps) – December 2021					
Rank	Was	s Broadband Provider	Average Download		Average Upload	
nalik	vvas		Speed	Change	Speed	Change
-	-	All home broadband	64.37	+2.69	14.68	+0.05
1	1	Virgin Media	134.73	+5.72	17.88	+0.96
2 🛦	3	BT	56.68	-0.68	13.63	-0.03
3 🔺	4	Vodafone Home	55.41	+11.71	19.15	+5.25
4 ▼	2	Zen Broadband	47.7	-20.24	15.87	-7.48
5	5	Sky / NOW Broadband	40.33	-0.83	10.77	+0.04
6	6	TalkTalk	34.45	-1.13	8.99	-0.47
7	7	EE Home	31.99	+1.22	7.34	+0.06
8	8	Plusnet / John Lewis	29.1	+2.31	6.95	+0.64

Overall, the average download speeds across all fixed line providers increased by 2.69Mbps to 64.37Mbps since last month, with upload speeds remaining stable at 14.68Mbps.

#### **Consumer mobile broadband providers**

Aver	Average mobile download & upload speeds (Mbps) – December 2021						
Rank	Was	Broadband Provider	Average Download		Average Upload		
nalik	was	Bioaubaliu Pioviuei	Speed	Change	Speed	Change	
-	-	All mobile broadband	38.77	+2.38	7.92	+0.29	
1 ▲	2	Three Mobile	44.78	+5.82	8.23	+1.32	
2 ▼	1	EE Mobile	38.04	-1.25	8	-1.07	
3	3	Vodafone Mobile	28.36	+1.64	6.72	+0.99	
4	4	O2 Mobile	21.77	+3.26	5.13	-0.08	

Overall, the average download speeds across all mobile broadband providers increased by 2.37Mbps to 38.77Mbps since last month, with upload speeds increasing by 0.29Mbps to 7.92Mbps.



#### Combined home and mobile broadband rankings

Average broadband download & upload speeds (Mbps) – December 2021						
Rank	Was	Broadband Provider	Average Download		Average Upload	
nalik	vvas	Broauband Provider	Speed	Change	Speed	Change
-	-	All home broadband	64.37	+2.69	14.68	+0.05
-	-	All mobile broadband	38.77	+2.38	7.92	+0.29
1	1	Virgin Media	134.73	+5.72	17.88	+0.96
2 🛦	3	BT	56.68	-0.68	13.63	-0.03
3 ▲	4	Vodafone Home	55.41	+11.71	19.15	+5.25
4 ▼	2	Zen Broadband	47.7	-20.24	15.87	-7.48
5 🔺	7	Three Mobile	44.78	+5.82	8.23	+1.32
6 ▼	5	Sky / NOW Broadband	40.33	-0.83	10.77	+0.04
7 ▼	6	EE Mobile	38.04	-1.25	8	-1.07
8	8	TalkTalk	34.45	-1.13	8.99	-0.47
9	9	EE Home	31.99	+1.22	7.34	+0.06
10	10	Plusnet / John Lewis	29.1	+2.31	6.95	+0.64
11	11	Vodafone Mobile	28.36	+1.64	6.72	+0.99
12	12	O2 Mobile	21.77	+3.26	5.13	-0.08

Overall speed performance of consumer mobile broadband is roughly comparable to that of many fixed line broadband providers. However, only 9.5% of the speed tests performed in December 2021 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 2021					
Rank \	Was	Broadband Provider	Average Upload		Average Download	
nalik	was	Broadballd Provider	Speed	Change	Speed	Change
-	-	All home broadband	14.68	+0.05	64.37	+2.69
-	-	All mobile broadband	7.92	+0.29	38.77	+2.38
1 🛦	3	Vodafone Home	19.15	+5.25	55.41	+11.71
2	2	Virgin Media	17.88	+0.96	134.73	+5.72
3 ▼	1	Zen Broadband	15.87	-7.48	47.7	-20.24
4	4	ВТ	13.63	-0.03	56.68	-0.68
5	5	Sky / NOW Broadband	10.77	+0.04	40.33	-0.83
6	6	TalkTalk	8.99	-0.47	34.45	-1.13
7 🔺	9	Three Mobile	8.23	+1.32	44.78	+5.82
8 ▼	7	EE Mobile	8	-1.07	38.04	-1.25
9 ▼	8	EE Home	7.34	+0.06	31.99	+1.22
10	10	Plusnet / John Lewis	6.95	+0.64	29.1	+2.31
11	11	Vodafone Mobile	6.72	+0.99	28.36	+1.64
12	12	O2 Mobile	5.13	-0.08	21.77	+3.26

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 2021 average fixed line broadband download speed was 4.38 times faster than upload speed, while mobile broadband downloads averaged at 4.89 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 2021					
Broadband Provider	Overnight (00:00 to 07:59)	<b>Daytime</b> (08:00 to 17:59)	Evening (18:00 to 23:59)	Overall (00:00 to 23:59)	
All home broadband	68.6	63.54	64.81	64.37	
All mobile broadband	57.34	36.83	35.43	38.77	
Virgin Media	137.29	133.27	136.37	134.73	
BT	61.72	56.6	55.51	56.68	
Vodafone Home	57.05	57.58	52.64	55.41	
Three Mobile	58.17	43.95	40.2	44.78	
Sky / NOW Broadband	44.59	40.79	38.65	40.33	
EE Mobile	58.21	36.97	33.83	38.04	
TalkTalk	31.08	35.09	34.18	34.45	
Plusnet / John Lewis	32.95	29.08	28	29.1	

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 2021					
<b>Broadband Provider</b>	Average Download	Average Upload			
Vodafone Wholesale	71.34	36.06			
Post Office	24.77	5.44			
Gigaclear	128.14	107.82			
TalkTalk Business	29.07	6.97			
Hyperoptic	143.79	100.63			

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**

Aver	Average download & upload speeds (Mbps) – December 2021					
Rank	<b>Broadband Provider</b>	Average Download	Average Upload			
1	Hyperoptic	143.79	100.63			
2	Virgin Media	134.73	17.88			
3	Gigaclear	128.14	107.82			
4	Vodafone Wholesale	71.34	36.06			
5	BT	56.68	13.63			
6	Vodafone Home	55.41	19.15			
7	Zen Broadband	47.7	15.87			
8	Three Mobile	44.78	8.23			
9	Sky / NOW Broadband	40.33	10.77			
10	EE Mobile	38.04	8			
11	TalkTalk	34.45	8.99			
12	EE Home	31.99	7.34			
13	Plusnet / John Lewis	29.1	6.95			
14	TalkTalk Business	29.07	6.97			
15	Vodafone Mobile	28.36	6.72			
16	Post Office	24.77	5.44			
17	O2 Mobile	21.77	5.13			



### **Expanded UK broadband upload speed rankings**

Aver	Average upload & download speeds (Mbps) – December 2021				
Rank	<b>Broadband Provider</b>	Average Upload	Average Download		
1	Gigaclear	107.82	128.14		
2	Hyperoptic	100.63	143.79		
3	Vodafone Wholesale	36.06	71.34		
4	Vodafone Home	19.15	55.41		
5	Virgin Media	17.88	134.73		
6	Zen Broadband	15.87	47.7		
7	BT	13.63	56.68		
8	Sky / NOW Broadband	10.77	40.33		
9	TalkTalk	8.99	34.45		
10	Three Mobile	8.23	44.78		
11	EE Mobile	8	38.04		
12	EE Home	7.34	31.99		
13	TalkTalk Business	6.97	29.07		
14	Plusnet / John Lewis	6.95	29.1		
15	Vodafone Mobile	6.72	28.36		
16	Post Office	5.44	24.77		
17	O2 Mobile	5.13	21.77		



#### 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)
  - **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
  - Zen
- 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 Chris Said via email at press@broadband.co.uk