Introduction

The internet speed data was gathered using two different devices. A Macbook Pro and a desktop computer. The MBP was used to test signal strength near the router in the kitchen and later in the bedroom. The desktop was used for testing against a stressed network since it has the best signal with both access points in the bedroom.

Test Results

Device: MBP
Access Point: G1100
Location: Kitchen
Stressed Network: False

Minimum ping: 7.25
Maximum ping: 39.1
Average ping: 11.28

Minimum download: 22.22
Maximum download: 98.22
Average download: 66.03

Minimum upload: 13.16
Maximum upload: 20.49
Average upload: 19.45

Device: MBP
Access Point: RT-AC1200
Location: Kitchen
Stressed Network: False

Minimum ping: 7.1
Maximum ping: 18.08
Average ping: 11.25

Minimum download: 34.03
Maximum download: 62.58
Average download: 51.33

Minimum upload: 15
Maximum upload: 20.41
Average upload: 19.4

Device: MBP
Access Point: G1100
Location: bedroom
Stressed Network: False

Minimum ping: 7.43
Maximum ping: 23.7
Average ping: 11.54

Minimum download: 7.59
Maximum download: 49.46
Average download: 29.94

Minimum upload: 3.7
Maximum upload: 20.47
Average upload: 17.83

Device: MBP
Access Point: RT-AC1200
Location: bedroom
Stressed Network: False

Minimum ping: TODO
Maximum ping: TODO

Average ping: TODO

Minimum download: TODO
Maximum download: TODO
Average download: TODO

Minimum upload: TODO
Maximum upload: TODO
Average upload: TODO

Device: desktop
Access Point: RT-AC1200
Location: bedroom
Stressed Network: False

Minimum ping: 209.75
Maximum ping: 8.75
Average ping: 48.56

Minimum download: 7.53
Maximum download: 20.46
Average download: 13.88

Minimum upload: 3.5
Maximum upload: 19.81
Average upload: 11.03

Device: desktop
Access Point: G1100
Location: bedroom
Stressed Network: False

Minimum ping: 8

Maximum ping: 22
Average ping: 12.34

Minimum download: 4.27
Maximum download: 17.51
Average download: 14.4

Minimum upload: 7.6
Maximum upload: 20.33
Average upload: 16.12

Device: desktop
Access Point: RT-AC1200
Location: bedroom
Stressed Network: True

Minimum ping: 8.5
Maximum ping: 29.75
Average ping: 15.23

Minimum download: 3.8
Maximum download: 14.5
Average download: 10.51

Minimum upload: 2.68
Maximum upload: 19.77
Average upload: 13

Device: desktop
Access Point: G1100
Location: bedroom
Stressed Network: True

Minimum ping: 20.7
Maximum ping: 8.75
Average ping: 82.75

Minimum download: 7.53
Maximum download: 20.46
Average download: 12.53

Minimum upload: 0.49
Maximum upload: 20.29
Average upload: 3.5

Device: desktop
Access Point: TP-LINK
Location: bedroom
Stressed Network: False

Minimum ping: 7.25
Maximum ping: 14.75
Average ping: 10.12

Minimum download: 19.9
Maximum download: 84.78
Average download: 67

Minimum upload: 18.29
Maximum upload: 21.64
Average upload: 20.67

Device: desktop
Access Point: TP-LINK
Location: bedroom
Stressed Network: True

Minimum ping: 6.75
Maximum ping: 14.25
Average ping: 9.87

Minimum download: 40.3
Maximum download: 87
Average download: 65.84

Minimum upload: 11.7
Maximum upload: 21.9
Average upload: 19.34

Conclusion

G1100 vs RT-AC1200 - under stress

- With the network under stress the G1100 router achieved an average download speed of 12.53 which is approximately 16% faster than the RT-AC1200 router.
- With the network under stress the G1100 router achieved an average upload speed of 3.5 which is approximately 73% slower than the RT-AC1200 router.

G1100 vs RT-AC1200 - normal conditions

- With the network in normal conditions the G1100 router achieved an average download of 14.4 which is approximately equal compared to the RT-AC1200 router.
- With the network in normal conditions the G1100 router achieved an average upload of 16.12 which is approximately 32% faster than the RT-AC1200 router.

TP-LINK vs G1100 - normal conditions

- With the network in normal conditions the TP-LINK router achieved an average download of 67 which is approximately 5 times faster G1100 router.
- With the network in normal conditions the TP-LINK router achieved an average upload of 20.67 which is approximately 1.3 times faster.

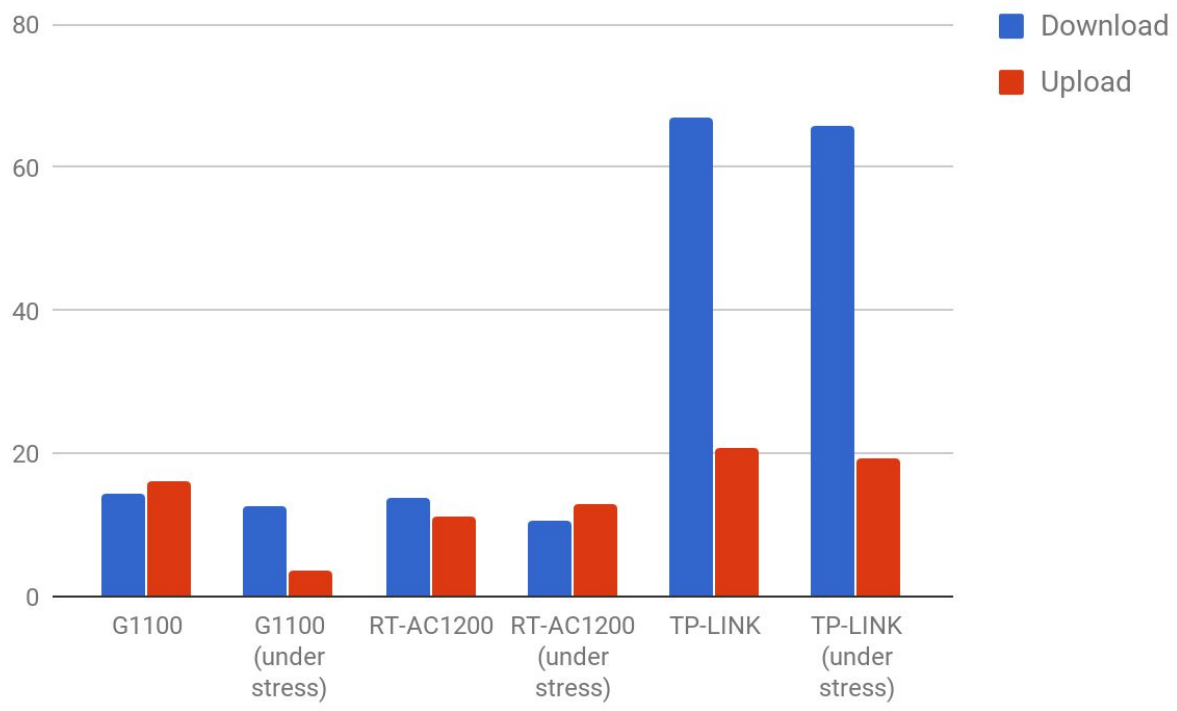
TP-LINK vs G1100 - under stress

- With the network under stress the TP-LINK router achieved an average download of 65.84 which is approximately 5 times faster than the G1100 router.
- With the network under stress the TP-LINK router achieved an average upload of 19.34 which is approximately 5 times faster than the G1100 router.

TP-LINK normal conditions vs TP-LINK under stress

- With the network under stress the TP-LINK router achieved an average download of 65.84 which is approximately 2% slower than the TP-LINK router under normal conditions.
- With the network under stress the TP-LINK router achieved an average upload of 19.34 which is approximately 8% slower than the TP-LINK router under normal conditions.

In conclusion, the RT-AC1200 only outperforms the G1100 routers upload speed in a stressed network environment. All other download, and upload times are equal or better. The RT-AC1200 is not any better of a router and therefore any positive effects we thought we were experiencing must have been a placebo. After the original round of testing a second round was done with a more high end router, the TP-LINK router appears to be about 5 times faster than the G1100 router.


80
60
40
20
0
Download
Upload
G1100
G1100 (under stress)
RT-AC1200
RT-AC1200 (under stress)
TP-LINK
TP-LINK (under stress)