

The differences between 2.4GHz and 5GHz Wireless

It is suitable for : **All TOTOLINK dual band Router**

STEP-1: Difference of 2.4G and 5G Wi-Fi

- 1-1. The primary difference between the 2.4 GHz and 5GHz wireless frequencies is range as the 2.4GHz frequency is able to reach farther than the 5GHz frequency. This is a result of the basic characteristics that waves attenuate much faster at higher frequencies. So if you are more concerned with the coverage, you should select 2.4GHz rather than 5GHz.
- 1-2. The second difference is the number of devices on the frequencies. 2.4GHz suffers more interference than 5GHz.
 - 1). The older 11g standard only uses the 2.4GHz frequency, majority of the world is on it. 2.4 GHz has fewer channel options with only three of them non-overlapping, while 5GHz has 23 non-overlapping channels.
 - 2). A lot of other devices are also on the 2.4 GHz frequencies, the biggest offenders are microwaves and cordless phones. These devices add noise to the medium that can further decrease the speed of wireless networks.

In both aspects, choosing to deploy on the 5GHz frequency is the much better option as you have more channels to use to isolate yourself from other networks and there are far fewer interference sources.

But the radar and military frequency is also 5GHz, so 5GHz wireless may also have some interference, and many countries require that wireless devices working on 5GHz should support DFS(Dynamic Frequency Selection) and TPC(Transmitting Power Control).

STEP-2: Summary

- 3-1. All TOTOLINK dual band routers support 2.4GHz and 5GHz simultaneously;
- 3-2. 5GHz has a shorter range than 2.4GHz;
- 3-2. 5GHz radio band that offers high-speed wireless connection that could with less interference in compare to 2.4G WiFi network.