5G Interference

A Tutorial from Rainier Satellite Tech Support.

Frequently Asked Questions about 5G Interference.

Q: Do I have a 5G interference problem?

A: If you previously received the signal well and all of a sudden is giving you problems it could be 5G has fired up in your area. 5G usually will show you a high signal strength with a "0" Quality and no signal lock, or Quality dropping to 0 every 5 to 10 seconds on your receiver.

Q: I get pixilation in my picture that comes and goes do I have 5G interference?

A: While pixilation can be caused by weak signal it could also be milder 5G. Check dish alignment. If all is correct you probably experiencing a mild form of 5G interference. If that's the case our filters will clean it up.

Q: I have a 8 foot or smaller dish. Will your filter help?

A: We recommend at least our 9 foot satellite dish or larger due to attenuation of satellite signal when using a 5G filter Rainier stocks 9 foot to 16.4 foot solid 5G rejection reflectors.

Q: Will any LNB work with your filter?

A: While any LNB could be used the best performance is achieved when using our Norsat 3120 PLL LNB.

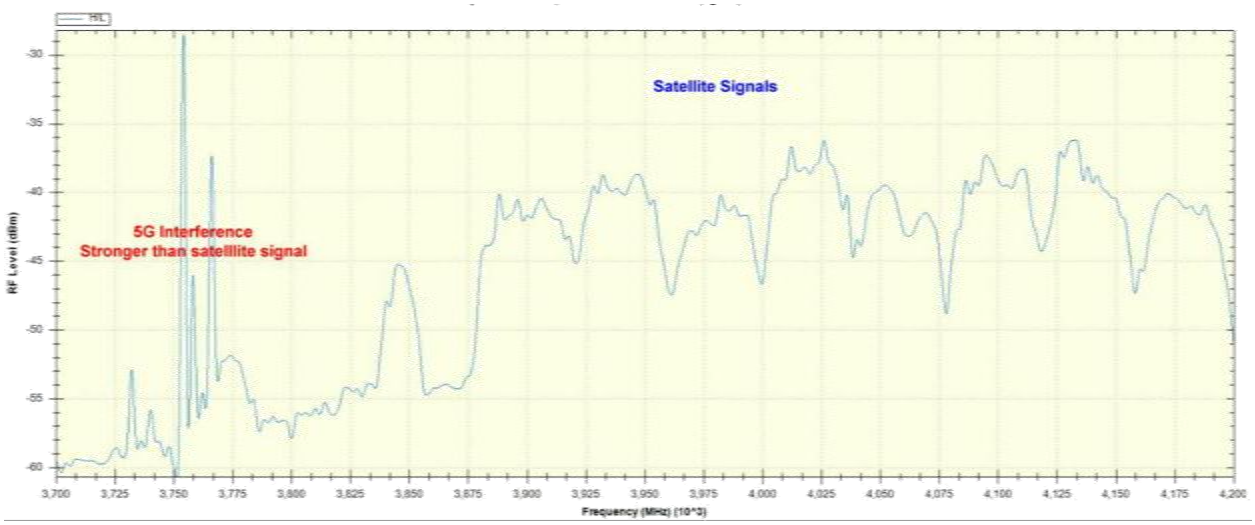
Q: Do I need the RED or BLUE filter?

A: I depends what frequency signals range you need to receive. For maximum protection once 5G is fully deployed in 2023 we recommend the BLUE filter.

Why does a 5G signal interfere with your satellite signal?

This is due to the simple fact that the local terrestrial signal is much stronger then the satellite signal. This overloads the LNB and or the receivers front end.

(see spectrum analysis below)



How to solve the problem.

The only way to solve this is to use a special bandpass filter between your LNB and feedhorn. This will attenuate the offending 5G signals prevent current or future problems.

What not to use.

Avoid No Name Low Cost Offshore Products.

These will not properly resolve your 5G interference issues. Dealers who stock these low cost products have no track record in the industry, or proven results by infield testing by TV and Radio stations.

Avoid Noname Offshore 5G Products

These low cost products omit proper cavity filter design to cut costs. Critical bandwidth and attenuation characteristics needed for proper operation does not exist. You end up with a partially functioning device that won't perform or meet your needs. Stay away from these.

Rainier Satellite stocks Broadcast Industry Tested 5G bandpass filters to resolve your problem.

5G Bandpass Filters

MADE IN THE USA

Use with our Norsat 3120 LNB for the best Solution

HIGH PERFORMANCE
TESTED PROVEN RESULTS IN THE INDUSTRY BY TV and RADIO STATIONS!

Our 5G filters work! while offshore low cost filtered LNB's and LNBF's fail.

Products Not to use:

LNB and LNBF's with 5G filters built in. *These do not reduce 5G very well. They don't have the amount of of attenuation or bandpass required to insure trouble free 100% performance. They may seem to work at times but not others. This is their shortcomings showing. They're Made in China with low cost low quality parts. They overheat and don't last. (They come in various brand names but all made by the same Chinese manufacturer) They are not approved by TV - Radio Stations or by Rainier Satellite Tech Center. Stay away from these.*

With the introduction of 5G networks, C-Band frequencies will now be shared with a wider range of services. The resulting interference signals can be powerful enough to saturate the sensitive C-Band satellite receiving systems which may result in total loss of service.

Without a bandpass filter, out of target frequency interference "overloads" the conversion or receiver's front end. The filter attenuation should be high enough (60 DB or more) to allow the bandpass frequencies to be received without interference. Our filters have been highly successful at eliminating the interference within the reduced C-band frequency range with only a 1.3 DB maximum insertion loss.

Our 5G filters will clear portions of the C-Band spectrum to mitigate disruption and interference of existing services due to the reallocation of the spectrum to 5G transmissions. Available in either the “Blue” or the “Red” bandpass option, they can be used in both single and multi-feed receive antenna applications, are environmentally sealed, moisture resistant and are easily installed between the C-Band feedhorn and the LNA or LNB.

You can order these from Rainier Satellite (use link below)

http://www.shop.rainiersatellite.net/webstore/lnbplus.htm#filt