

# Newsletter

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## 5G Frequencies in Ireland



We are often asked what frequency is used to transmit 5G. Hopefully, this article will help.

It is important to remember that 5G is not a frequency itself. 5G is short for Fifth Generation Cellular Network Technology, the next generation of mobile broadband following on from 4G. It is often confused with the 5Ghz signal transmitted from a router or modem.

### EU Allocated 5G Bands

LTE700 694 - 790 Mhz C Band 3.4 - 4.2GHz mmWAVE 25.1 - 27.5 GHz

#### LTE700 694 - 790 Mhz

Thanks to its excellent propagation and penetration ability, LTE700 appears to be the key to achieving coverage throughout rural Ireland.

LTE700 uses the bandwidth formerly used to transmit TV channels 50 to 60, consequently it can cause interference on some TV channels. Luckily, this problem is easily eliminated by installing suitable filters in TV aerial installation.

### C Band 3.4 - 4.2GHz

Since 2019, this frequency has been rolled out in major cities and towns in Ireland and in some rural locations. It is a "sweet spot" for 5G transmission, striking a nice balance between capacity and coverage. However, due to its high frequency it lacks penetration. This makes it impractical for most rural and lowly populated areas.

#### mmWAVE 25.1 - 27.5 GHz

mmWAVE, the 26 Ghz band, is not in use in Ireland and is not expected to be deployed for some time yet. Due to its high frequency, 26GHz has poor penetration characteristics. Its use appears to be limited to very short range communication. It will probably only be used for IoT (Internet of Things), M2M (Machine to Machine), internal communications and IP networks.

At <u>ATC Supplies.ie</u> we are fully committed to providing top quality products for 5G reception.

Check out our 5G products <u>here</u> and feel free to call us if you want any information.

We provide 100% technical support on everything we sell.

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