



Once the antenna was set up and plugged into my hot spot I was eager to see if there would be any improvements using the 12dbi antenna. There has been a lot of changes to the Helium Network during my testing time with the antennas, we have moved over to light hotspot firmware, rewards have been lowered due to the amount of hot spots that have come on line. After monitoring for 14 days I was pleased that overall my rewards had increased by 15% my beacons were being picked up in excess of 30km this is from a 25 milliwatts signal that the hotspot beacons at regular intervals, which is once or twice every couple of days and of course we get rewards from other hotspots that beacon and I receive. Over all I am extremely pleased with the performance and build quality of both antennas..



**SWR on both antennas was under 1.5:1 across the frequency range measured on my NanoVNA-H4**

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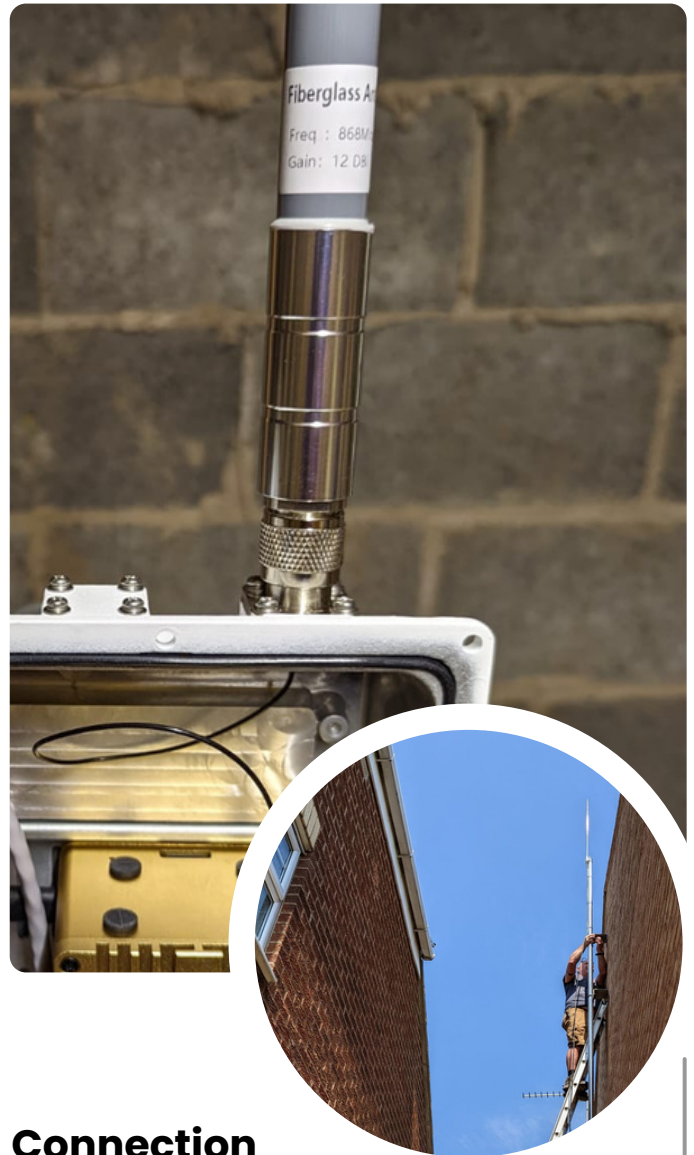
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# HELIUM

## Down to business

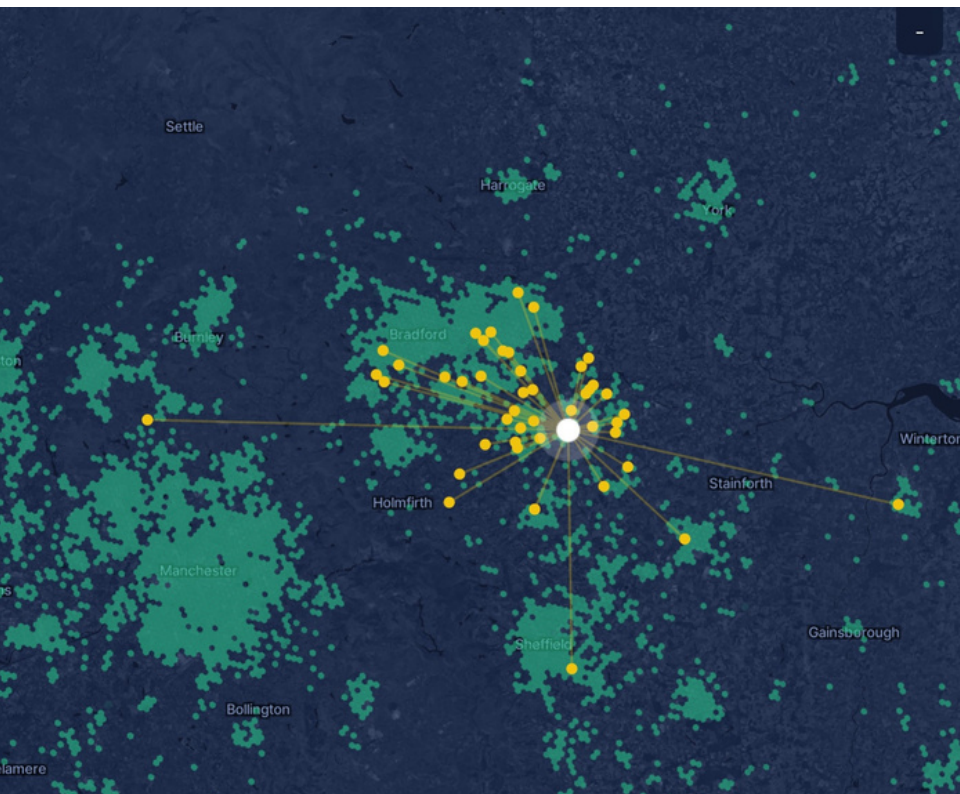
So this is my review on the Blake LoRa 868mhz 12dbi and 9dbi antennas, These are very well built to a good commercial standard and terminated with a good quality N-type male plug that seems to be common practice on these type of antennas. The 12dbi comes in at 370 grams and is 120cms long almost 4 foot in length, the 9dbi is 262 grams and 85cms in length. The fibreglass enclosure is grey in colour and blends in well with the skyline, particularly on our predominately British grey weather days. I installed the 12dbi antenna on a 20ft 2inch pole, using LMR400 equivalent cable terminated with the correct connectors.

**Monday 20th June 2022**



## Connection

The sma and LMR400 cable easily fit through my air brick and into my loft where my Helium miner resides, antenna installation was very straight forward especially with the light weight and no radials on the antenna to have to deal with.



# Blake LoRa 868 mhz 12 Dbi and 9Dbi Antenna Review

## Helium Mining (What is it)

Helium is a decentralized wireless network for "internet of things" devices, powered by cryptocurrency. The network is made up of devices called Helium hot spots, gadgets with antennas that can send small amounts of data over long distances using radio frequencies.

## Helium Mining Devices

I personally run two mining hot spots, A sencecap m1 and a RAK MNTD V2 Goldspot. The heart of these devices is the well known raspberry pi in most cases. The bobcat is also a very widely used hot spot that uses a different processor

## Helium Mining (my set up)

Zany Golden Rooster is the name of my main hotspot, I am striving to maximise its potential coverage that should help with my HNT (crypto currency) rewards and also give good solid coverage for the network. I decided to use a local firm to do some antenna comparisons and see if I could improve on my set up that is already doing well, Helium is constantly changing there network parameters and this does have a big effect on the end users.

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