



# **Description**

Available through WiMo Germany and DX Engineering in the USA - for Direct factory supply, Email us for pricing and time lines.

www.dxengineering.com - www.wimo.com

A 10 element Very Low Noise Yagi for serious DX, weak signal and EME applications upon 222MHz

The G0KSC LFA (Loop fed Array) Yagi has quickly become 'the one to have' if you are looking for serious weak signal work on the bottom of the 222MHz band. The LFA Yagi has been specifically design to ensure the lowest levels of unwanted noise are received. The compliment of a tight, highly suppressed pattern and closed loop fed system ensure everything from rain static to man-made noise are heavily reduced.

Read more about why the LFA is better <u>HERE</u>

The LFA is especially effective for EME where very low noise antennas are required and many hours development have been spent ensuring the highest levels of performance have been achieved in an antenna that is not affected by wet weather conditions. As a single, double and 4 stack system, the LFA Yagi is the one to have.

Our antennas are constructed with the best quality materials in order the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what they should be, this ensures our antennas work as well as our software model predicts.

- 1. Marine grade Stainless Steel Fittings\*
- 2. Original Stauff insulator clamps
- 3. Mill finished for highest levels of accuracy

If you are looking for the best of the best from both a performance and mechanical construction perspective then look no further, you have come to the right place!

#### Performance

Gain: 14.48dBi @ 222.050MHz

Gain (1 antenna 10m above ground): 20.37dBi

Gain (2 stacked 10m above ground): 22.84Bi

**F/B:** 32.20dB @ 222.050MHz

Peak Gain: 14.56dBi

Peak F/B: 32.54dB

Power Rating: 4kw

1 / 4

SWR: Below 1.1.1 from 221.500MHz to 223.500MHz

Boom Length: 3.425m

Stacking Distance Vertically: 1.5 -2.0m (best trade-off 1.75m)

Stacking Distance Horizontally: 1.6 - 2.1m (best trade-off 1.9m)

2 Stacked Vertically @ 1.75m Gain: 17.19dBi

2 Stacked Vertically @1.75m F/B: 33.63dB

2 Stacked Horizontally @ 1.9m Gain: 17.22dBi

2 Stacked Horizontally @ 1.9m F/B: 33.26dB

4 Antennas 1.75m V x 1.9m H Gain: 19.98dBi

Sky Temperature: 229.6 Kelvin @ 222.050MHz

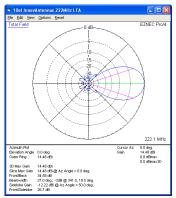
G/T Figure: -2.96dB @ 144.100MHz

### Specification

This antenna has all parasitic elements made from 1/4 inch aluminum rod. The LFA loop is constructed from 4 pieces of aluminum tube. The sections in-line with the parasitic elements are 1/2 inch while the end sections of the loop are 3/8 inch allowing the user to adjust the loop for best SWR. All elements are fully insulated from the boom held in place by high quality UV resistant, **RF neutral insulators** which in-turn are held to the boom via **Marine grade** stainless steel fixings and fittings.

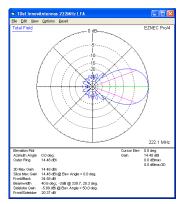
The boom is 1.25 inch square (31.75mm)

If you want an antenna to last and perform in all weathers without SWR or bandwidth shifting, this is it.

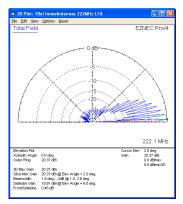


**Azimuth Plot** 

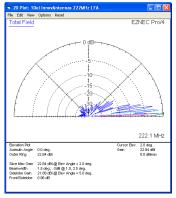
2 / 4



**Elevation Plot** 



Single antenna 10m above average ground

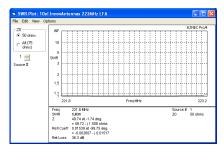


2 x 10el 222MHz LFAs 10m up and 1.75m apart



3 / 4

## The 222MHz 10el LFA element layout



SWR

## Manufactured the right way, not the cheapest way!

\*Where possible marine grade stainless steel components are used. //