

A super low-noise 50MHz LFA Yagi



Description

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

 $\underline{www.dxengineering.com} \text{-} \underline{www.wimo.com}$

A 6 element very low-noise LFA3 Yagi

The G0KSC LFA Yagi is a major step forward in the development of the Yagi Antenna; **it provides a low-noise front-end for your radio so you hear more weak signals**. This compact 6 element 50Mhz LFA provides stunning performance across the important section of the 6m band (50.00 - 50.500MHz). Hard to beat with a direct 50 Ohm feed-point and no matching losses and suppression of unwanted noise!!

This antenna has very highly suppressed lobes in both azimuth and elevation plots and therefore is ideal for very noisy city locations. If you want to beat the noise in a mid-sized 6m antenna, this is the one for you!



DEMONSTRATION

VA3NCD had the luxury of being able to install 2 50MHz 7el Yagis for testing one against the other. One an M2 7el JHV, the other an InnovAntennas 7el LFA-WOS. He points them to various beacons and switches the antennas.

No need to explain which is the LFA and why the LFA Yagi is called THE Low Noise Yagi!

Performance

11.9dBi @ 50.150MHz

29.18dB @ 50.150MHz

Peak Gain: 11.97dBi

Peak F/B: 30.21dB

Power Rating: 5kw+

SWR: Below 1.1:1 from 50.00MHz to 50.500MHz

Stacking Distance: 5.5-6.4m (5.8m recommended)

2 Stacked Gain @ 5.8m spacing: 14.77dBi

2 Stacked F/B: 30.72dB

2 Stacked Gain @ 5.8m Spacing 15m above ground: 20.15dBi

Boom Length: 6.830m

Weight: 6.63Kg / 14.61LB

Turning Radius: 3.699m / 12.1ft

Wind Loading: 0.26 Square Metres / 2.81 Square feet

Wind Survival: 203KPH / 126MPH

Other options available if higher wind loading/survival is required.

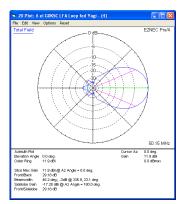
Specification

This antenna is made with tapered elements 1/2inch (12.7mm) centres and 3/8 inch (9.525mm) outer sections. The antenna has fully insulated elements which will ensure continuous, high performance for many years to come. Boom to mast brackets are included with all antennas which will support 2 inch (50mm) masts. Boom is 1.5 inch (38mm) square 16SWG aluminum.

Our antennas are constructed with the best quality materials in order that 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, ensuring they work as well as our software model predicts.

Note: Much development time has gone into our antennas, not just on basic electromagnetic design, we are able to model the effect of insulators, booms and other objects to ensure the make up of our antennas have least effect on performance and pattern degradation. More information can be found here

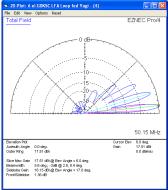
- Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- · Mill finished boom and elements for highest levels of accuracy



Azimuth Plot



Elevation Plot

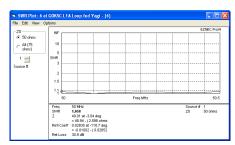


Single 6 element LFA up 15m above ground

3 / 4



2 x 6 el LFA Yagi 5.8m apart with the bottom antenna 15m above ground



SWR

Manufactured the right way, not the cheapest way!

//