

A low-noise 70MHz LFA2 Yagi

# 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 2 element low-noise LFA2 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 very compact 2 element 70Mhz LFA provides stunning performance across the important section of the 6m band (69.90 - 70.600MHz). Hard to beat with a direct 50 Ohm feed-point and no matching losses and suppression of unwanted noise !!

The LFA2 has a unique 'bent reflector' system installed which enhanced F/B and bandwidth of the antenna. This is an extremely compact antenna for these performance levels, especially when stacked!

## Performance

Gain: 6.52dBi @ 70.200MHz

F/B: 16.35dB @ 70.100MHz

Peak Gain: 6.77dBi

Gain at 10m above Ground: 12.22dBi @ 50.100MHz

Peak F/B: 16.93dB

Power Rating: 5kw

SWR: Below 1.3.1 from 69.90MHz to 70.600MHz

Stacking Distance: 2.0-3.0m (2.5m recommended)

2 Stacked Gain @ 2.5m spacing: 10.02dBi

2 Stacked F/B: 18.04dB

2 Stacked Gain @ 2.5m Spacing 10m above ground: 15.5dBi

Boom Length: 0.550m

Weight: 1.8Kg / 4.03LB

Turning Radius: 1.1m / 3.63ft

Wind Loading: 0.1 Square Metres / 1.1 Square feet

Wind Survival: 185KPH / 115MPH

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

## REAR MOUNT AVAILABLE UPON REQUEST AND REQUIRED FOR VERTICAL MOUNTING

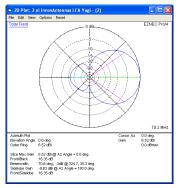
## Specification

This antenna is made 1/2 inch (12.7mm) center elements and 3/8 inch (9.525mm) outer elements. 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 1.25 inch square 16SWG aluminum.

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 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 or our antennas have least effect on performance and pattern degradation. More information can be found <u>here</u>

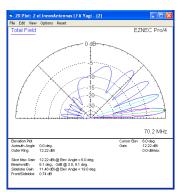
- Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- · Mill finished boom and elements for highest levels of accuracy



## **Azimuth Plot**



**Elevation Plot** 



Single 2 element LFA up 10m above ground



2 x 2el LFA Yagi 2.5m apart with the bottom antenna 10m above ground

ile Edit View v	Options						
20	EZNEC P						NEC Pro/4
<ul> <li>50 ohms</li> <li>Alt (75 ohms)</li> </ul>	10 ··· 5 ··· SMR 3 ···						
1 <u>source</u> #	2 ··· 1.5 ··· 1.1 ··· 69/	<u> </u>		reg MHz			70.5
	Freq SMR Z	69.9 MHz 1.22 47.1 at -10.8 = 46.25 - j 8.3 0.09988 at -1 = -0.03015 -	9 deg. 397 ohms 07.57 deg.	in the second seco	Sou ZO	rce# 1	0 ohms

SWR



The 2el LFA2

Manufactured the right way, not the cheapest way!  ${\slashed{lmm}}$