



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.

[www.dxengineering.com](http://www.dxengineering.com) - [www.wimo.com](http://www.wimo.com)

An 8 element low-noise LFA2 Yagi - super low noise Yagi - 2023 update

**Got a lot of noise you want to get rid of? Maybe you are a contester of DX'er who does not want to listen to anyone off of the sides or back? If so, read on...**

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 8 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 idea for very noisy city locations. If you want to beat the noise in a mid-sized 6m Antenna, this is the one for you!

The LFA2 has a Bent Reflector system designed to enhance SWR bandwidth and F/B.

This from KA1W:

*"Hello Justin, I finally got the 8el up on the tower and have been trying to learn its lobes and patterns.*

*So far it has been out performing my \*\*67 at the same height hands down.*

*On recent F layer openings I worked 3B9, 3B8, FR, 7Q and had two QSO's with ZL1RS on mnoon rise EME and F layer propagation. The \*\*67 failed miserably."*



The 8el LFA @ KA1W

Performance

13.57dBi @ 50.150MHz

29.94dB @ 50.150MHz

**Peak Gain:** 13.64dBi

**Gain 15m above average ground:** 19.19dBi

**Peak F/B:** 35.69dB

**Power Rating:** 5kw+

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

**Stacking Distance:** 5.5 -7.0m ( 6.5m recommended)

**2 Stacked Gain @ 6.5m spacing:** 16.35dBi

**2 Stacked F/B:** 31.35dB

**2 Stacked Gain @ 6.5m Spacing 15m above ground:** 21.83dBi

**Boom Length:** 11.678m

**Weight:** 17.9Kg / 39.4LB

**Turning Radius:** 6.031m / 19.8ft

**Wind Loading:** 0.52 Square Metres / 5.62 Square feet

**Wind Survival:** 172KPH / 107MPH - **A 125MPH+ (HD) version available upon request**

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

***A 1:1 Balun is recommended if feeding this antenna with Coax Cable.***

### Specification

This antenna is made with tapered elements 16mm centers and 13mm outer sections, both with 2mm wall thickness. 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 45mm tapering to 40mm at the ends and also with 2mm wall. **A Kevlar boom guy system is provided with this antenna.**

**Tower mounting hardware and custom mast mounts available upon request.**

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 of our antennas have least effect on performance and pattern degradation. More information can be found [here](#)

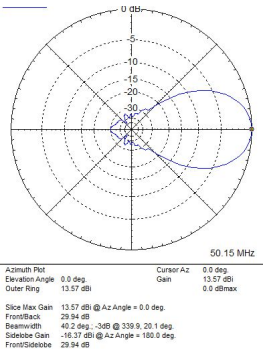
- **Marine grade Stainless Steel Fittings**
- **Original Stauff Insulation clamps**
- **Mill finished boom and elements for highest levels of accuracy**
- **Guy support system supplied**



The 8el 11.7m long LFA-2 for 50MHz

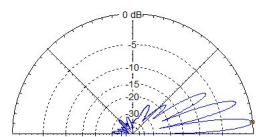


4 x 8el 11.7m 50MHz LFA-2 @ W2RE



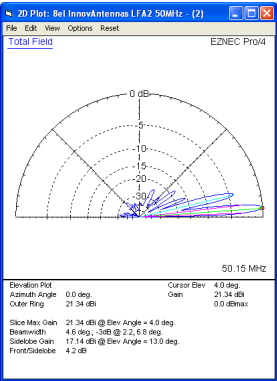
Azimuth Plot

8el 50MHZ LFA Yagi by G0KSC

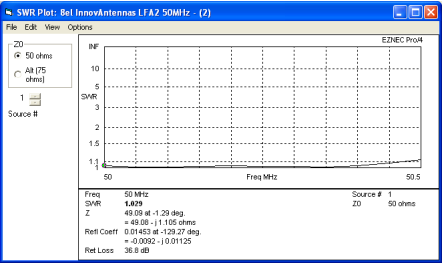


50.15 MHz	
Elevation Plot	Cursor Elev 5.5 deg
Azimuth Angle	Gain 19.19 dBi
Outer Ring	0.0 dBmax
Slice Max Gain	19.19 dBi @ Elev Angle = 5.5 deg
Beamwidth	5.0 deg @ -3dB @ 2.2, 8.4 deg
Sidelobe Gain	17.29 dBi @ Elev Angle = 16.9 deg
Front/Side/Back	1.9 dB

Single 8 element LFA up 15m above ground



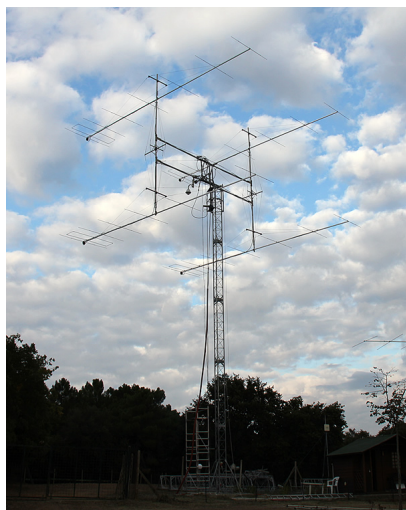
2 x 8 el LFA Yagi 6.5m apart with the bottom antenna 10m above ground



SWR



**2 x 8el 50MHz LFA2-8S @ JA1BK**



**4 x 11.67m long 50MHz LFA2s at IW5DHN**

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

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