

A 10 element super low-noise 432MHz 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 - www.wimo.com

A Super Low Noise Yagi for serious DX and EME applications

The G0KSC LFA (Loop Fed Array) Yagi has quickly become 'the one to have' if you are looking for serious weak signal work on VHF and UHF bands. Unlike other companies and designers, G0KSC has dismissed the 'one size fits all' antenna modeling approach and does not model every antenna as if it were for the HF bands. Instead careful consideration is taken to ensure the performance parameters of each antenna fit well with the characteristics of the band in question. Sky and ground noise (temperature) play a role in an antenna's ability to receive signals and the G0KSC LFA-SQ (Super Quiet) Yagi has been modeled for the absolute best noise figures, ensuring you can hear anyone that hears you, even if you are QRO and they are not!

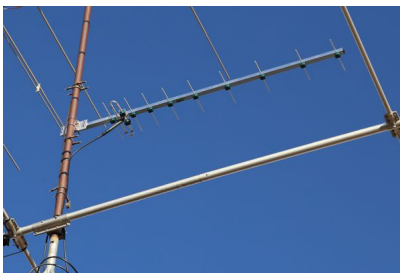
Read more about the LFA Yagi [HERE](#).

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 (or more) 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 0.1mm of what they should be, this is extremely important on 432MHz and measurements must be as accurate as possible if performance and temperature are to be maintained.

1. **Marine grade Stainless Steel Fittings***
2. **Original and best Stauff Insulator clamps**
3. **Mill machined for pin-point accuracy throughout**

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!



Rear mounted version of the 10el 430-435MHz LFA Yagi at Rob Sherwood, NC0B. Rob is the author of the Sherwood receiver

Performance List.



Element and dipole setup on our booms - Marine grade stainless steel used throughout

Performance

Gain: 14.46dBi @ 432.200MHz

F/B: 28.01dB @ 432.200MHz

Peak Gain: 14.52dBi

Gain 10m above Ground: 20.47dBi

Peak F/B: 28.55dB

Power Rating: 3kw

SWR: Below 1.2:1 from 431.00MHz to 433.00MHz

Boom Length: 1.765m

Stacking Distance Vertically: 0.8-0.955m (best trade-off 0.906m)

Stacking Distance Horizontally: 0.92-1.15m (best trade-off 1.016m)

Following figures calculated at 432.200MHz

2 Stacked Vertically 10m up @ 0.906m spacing - Gain: 23.13dBi

2 Stacked Vertically 10m up @ 0.906m spacing - F/B: 31.87dBi

2 Stacked Horizontally 10m up @ 1.016m spacing - Gain: 23.25dBi

2 Stacked Horizontally 10m up @ 1.016m spacing - F/B: 29.68dB

4 Antennas 0.906m V x 1.016m H Gain: 20.07dBi, **F/B:** 33.60dB (free space)

Sky Temperature: 28.3 Kelvin @ 432.200MHz

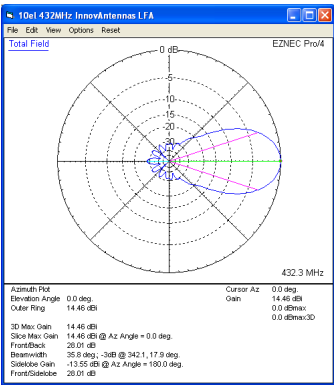
G/T Figure: 5.56dB @ 432.200MHz

Specification

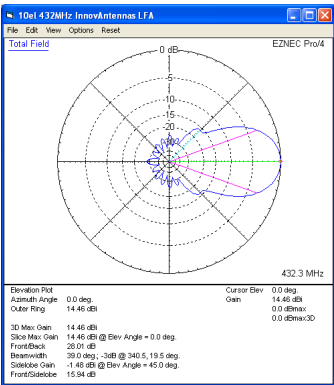
This antenna has all parasitic elements made from 1/4 inch aluminum rod. The LFA loop is constructed from 4 pieces of aluminum tube. The sections in-line with the parasitic elements are 1/2 inch while the end sections of the loop are 3/8 inch allowing the user to adjust the loop for best SWR. All elements 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 stainless steel fixings and fittings.

The boom on this antenna is 1.25 inch square (31.75mm)

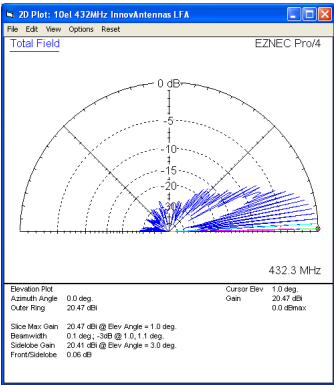
If you want an antenna to last and perform in all weathers without SWR or bandwidth shifting, this is it.



Azimuth Plot

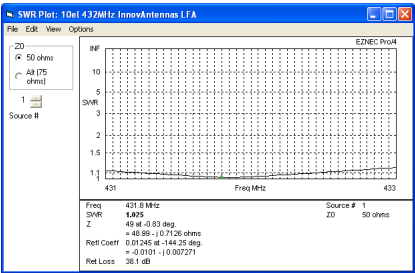


Elevation Plot



Single antenna 10m above average ground

432Mhz (70cms) Low-Noise LFA Yagis: 10 element 432MHz LFA-SQ Yagi



SWR



A 12el 432MHz LFA at WA6EJO

'Justin,

Put 4x16 up mast..... quick check of swr... 30 mins later 1st 70cms qso with UA3PTW easy peasy 32x15 his end!!! ok I had a lot of help....no pre amp this end..

they work really well...'

Ron, G8FJG

For multi-antenna array plots or more information, please contact us at [This email address is being protected from spambots. You need JavaScript enabled to view it.](#)

Manufactured the right way, not the cheapest way!

* Where possible marine grade stainless steel components are used.
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