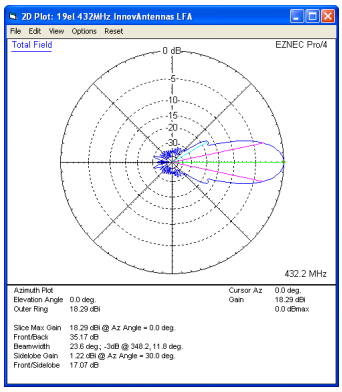




Sales price £195.95

Sales price without tax £163.29
Tax amount £32.66

A 19 element super low-noise 432MHz LFA Yagi

Description

Prices 20% less for customers outside of EU

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 antennas ability to receive signals and the G0KSC LFA-LN (Low Noise) Yagi has been modeled for the absolute best noise figures possible, ensuring you can hear anyone that hears you, even if you are QRO and they are not!

Design Notes:

The G0KSC LFA-LN series of Yagis for 432MHz have been specifically designed maximum suppression of the rearward 'bubble' when a singular or multi-antenna array are in use. The design allows for forward lobes to appear but keeps them close to the main lobe. This 'outlet' for the frontal lobes helps reduce the rear suppression when stacking and hence the much tighter rear pattern with almost every direction (other than the main lobe) being down 30dB.

The G0KSC LFA-LN LFA Yagis for 70cms are streets apart (in terms of performance) from anything else in it's class and more and more hams will become accustomed to the stunning performance they deliver, as time goes by.

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!





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

Performance

Gain: 18.29dBi @ 432.200MHz

F/B: 35.17dB @ 432.200MHz

Peak Gain: 18.41dBi

Gain 10m above Ground: 24.25dBi

Peak F/B: 36.24dB

Power Rating: 3kw

SWR: Below 1.1.1 from 432.00MHz to 433.00MHz

Boom Length: 4.560m

Stacking Distance Vertically: 1.35-1.7m (best trade-off 1.642m)

Stacking Distance Horizontally: 1.365-1.8m (best trade-off 1.697m)

Following figures calculated at 432.200MHz

2 Stacked Vertically 10m up @ 1.642m spacing - Gain: 27.03dBi

2 Stacked Vertically 10m up @ 1.642m spacing - F/B: 36.12dBi

2 Stacked Horizontally 10m up @ 1.697m spacing - Gain: 27.17dBi

2 Stacked Horizontally 10m up @ 1.697m spacing - F/B: 37.05dB

4 Antennas 1.642m V x 1.697m H Gain (corrected): 24.05dBi, **F/B:** 37.88dB (free space)

Sky Temperature (corrected): 26.52 Kelvin @ 432.200MHz

G/T Figure (corrected): 9.82dB @ 432.200MHz

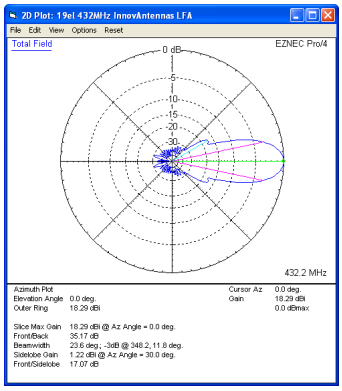
Specification

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

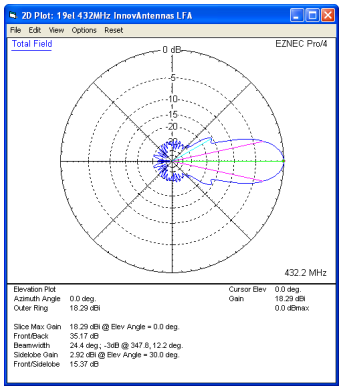
sections in-line with the parasitic elements are 1/2 inch while the end sections of the loop are 3/8 inch allowing the user to adjust the loop for best SWR. All elements are fully insulated from the boom, held in place by high quality UV resistant **RF neutral insulators** which in-turn are held to the boom via stainless steel fixings and fittings.

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

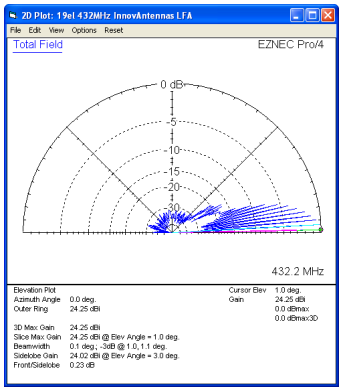
If you want an antenna to last and perform in all weathers without SWR or bandwidth shifting, this is it.



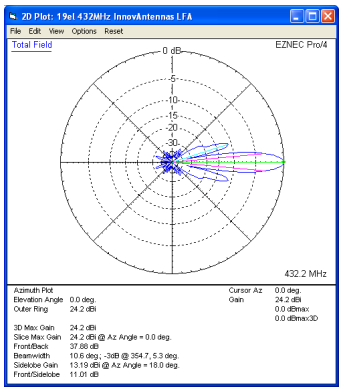
Azimuth Plot



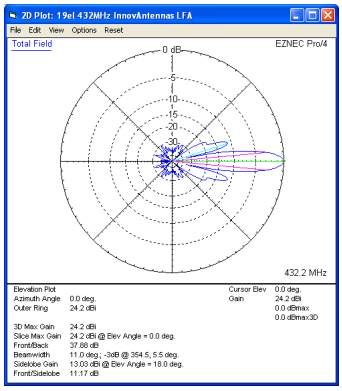
Elevation Plot



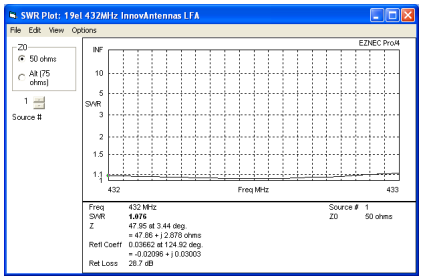
Single antenna 10m above average ground



Free space azimuth plot of 4 antennas - 1.642V x 1.697H



Free space elevation plot of 4 antennas - 1.642V x 1.697H



SWR

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.