



An 11 element low-noise 144MHz 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 11 element Very 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 the bottom of the 2m band. The LFA Yagi has been specifically designed to ensure the lowest levels of unwanted noise are received. The compliment of a tight, highly suppressed pattern and closed loop fed system ensure everything from rain static to man-made noise are heavily reduced.

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 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 0.2mm of what they should be, this ensures they work as well as our software model predicts.

1. **Marine grade stainless steel fittings\***
2. **Original Stauff insulator clamps**
3. **Mill finished for highest levels of accuracy**

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!



*"My 144-LFA-11 is up and flying!"*

*It should be on the air by the weekend. All my InnovAtions are working splendidly.*

*Thanks for all your guidance and patience.*

*Cheers!*

*Richard Kunc - W4KBX"*

#### **Performance**

**Gain:** 15.18dBi @ 144.100MHz

**Gain:** 15.20dBi @ 144.300MHz

**F/B:** 36.71dB @ 144.100MHz

**F/B:** 31.86dB @ 144.300MHz

**Peak Gain:** 15.25dBi

**Gain at 10m above ground:** 21.11dBi

**Peak F/B:** 37.65dB

**Power Rating:** 3kw

**SWR:** Below 1.1:1 from 143.700MHz to 145.100MHz

**Boom Length:** 6.193m

**Weight:** 4.02Kg / 8.86LB

**Turning Radius:** 3.129m / 10.26ft

**Wind Loading:** 0.13 Square Metres / 1.44 Square feet

**Wind Survival:** 201KPH / 125MPH

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

**Stacking Distance Vertically:** 2.4-3.5m (best trade-off 3.4m)

**Stacking Distance Horizontally:** 2.4-3.65m (best trade-off 3.5m)

*Following figures calculated at 144.300MHz*

**2 Stacked Vertically @ 3.2m Gain:** 18.02dBi

**2 Stacked Vertically @ 3.6m Gain:** 18.21dBi

**2 Stacked Vertically @3.2m F/B:** 32.82dB

**2 Stacked Vertically @3.6m F/B:** 32.25dB

**2 Stacked Horizontally @ 3.25m Gain:** 17.99dBi

**2 Stacked Horizontally @ 3.25m F/B:** 32.67dB

**2 Stacked Horizontally @ 3.5m Gain:** 18.10dBi

**2 Stacked Horizontally @ 3.5m F/B:** 33.05dB

4 Antennas 3.2m V x 3.4m H Gain: 21.30dBi

4 Antennas 3.55m V x 3.65m H Gain: 21.74dBi

Sky Temperature: 223.0 Kelvin @ 144.100MHz

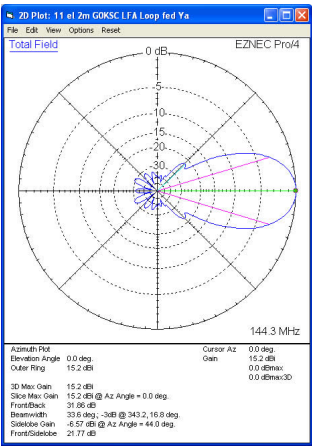
G/T Figure: -2.32dB @ 144.100MHz

Specification

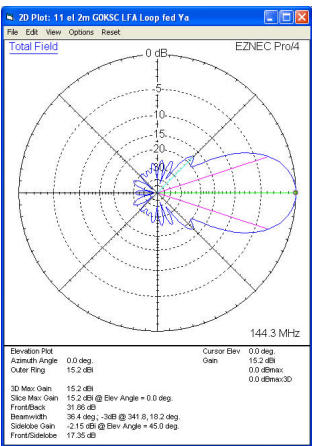
This antenna has all parasitic elements made from 6mm aluminum tube. The LFA loop is constructed from 4 pieces of aluminum tube. The sections in-line with the parasitic elements are 13mm while the end sections of the loop are 10mm allowing the user to adjust the loop for best SWR. All elements are fully 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 is 35mm square and a boom guy is supplied with this antenna.

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

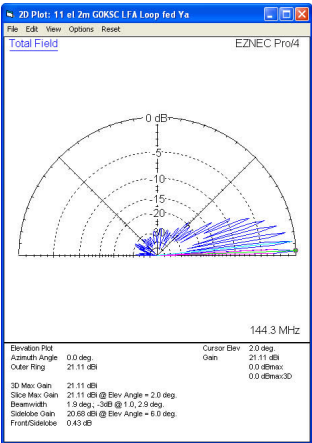


Azimuth Plot

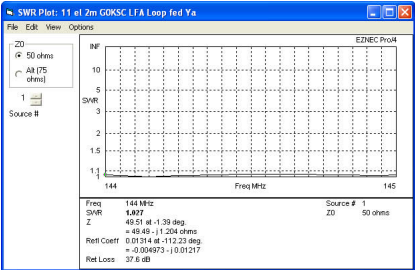


Elevation Plot

144MHz to 148MHz Yagis: 11 element 144MHz LFA Yagi



Single antenna 15m above average ground



SWR

Manufactured the right way, not the cheapest way!

\*Where possible marine grade stainless steel components are used.

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