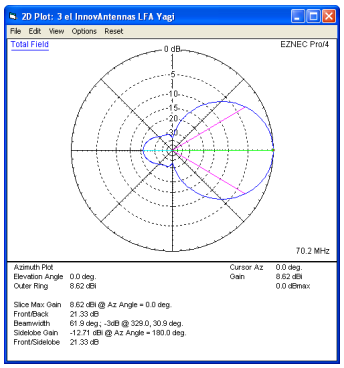
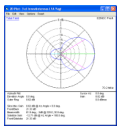




A low noise high gain 70MHz LFA-Q Directional Loop Array Heavy Duty Version

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 3 element Low Noise, High Gain Directional Loop array (LFA-Q) HD Version

The G0KSC LFA-Q possesses all of the design traits InnovAntennas have become well-known for. Direct 50 Ohm impedance (and hence no matching loss or pattern distortion), Minimal side lobes, High levels of Front to Back ratio (F/B) and Front to Rear ratio (F/R), and wide, flat bandwidth. However, the LFA-Q stands out for two more major benefits. High levels of forward gain and its' extremely rugged design which make it ideal for installation where harsh weather conditions are commonplace.

If you want the absolute best performance from minimal boom length and require performance that is available in any weather conditions or simply want something a little different, then the LFA-Q could be the one for you!

Performance

Gain: 8.62dBi @ 70.20MHz

F/B: 21.33dB @ 70.20MHz

Peak Gain: 8.81dBi

Peak F/B: 23.2dBi

Power Rating: 5kw+

SWR: Below 1.2:1 from 69.90MHz to 70.400MHz

Stacking Distance: 2.5-4.2m (3.5m recommended)

2 Stacked Gain @ 3.5m spacing: 11.9dBi (free space)

2 Stacked F/B: 34.95dB

2 Stacked Gain @ 3.5m Spacing 10m above ground: 17.41dBi

Boom Length: 1.190m

Weight: 2.46Kg /5.4LB

Turning Radius: 1.69m / 5.77ft

Wind Loading: 0.2 Square Metres / 2.15 Square feet

Wind Survival: 233KPH / 180MPH

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

Specification

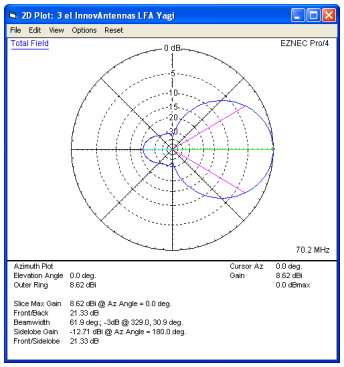
This antenna is made with tapered elements 1/2inch (12.7mm) centres and 3/8 inch (9.525mm) outer sections. The antenna has fully insulated elements which will ensure continuous, high performance for many years to come. Boom to mast brackets are included with all antennas which will support 2 inch (50mm) masts. The LFA-Q has a twin-boom system. Each section is 381.mm square with 1.6mm wall thickness. The booms are joined each end to one another by a second piece of the same material used for the boom. A UV protected Boom Guy system is also provided with stainless steel turnbuckles for easy adjustment.

The LFA-Q is also provided with 2 boom to mast brackets, one on each boom and both brackets comprise of 4 U bolts (2 square for the boom, 2 round for the supporting mast) which have been formed from marine grade stainless steel.

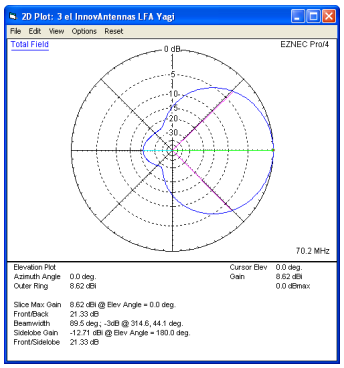
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what 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

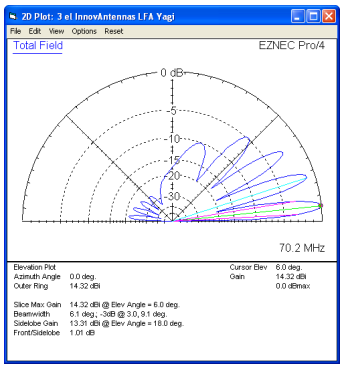
- **Marine grade Stainless Steel Fittings**
- **Original Stauff Insulation clamps**
- **Mill finished boom and elements for highest levels of accuracy**



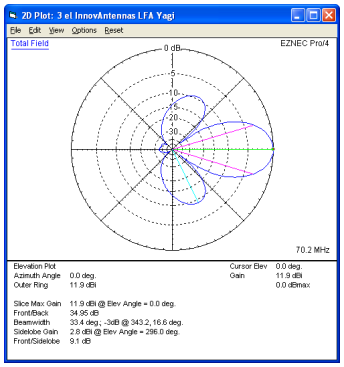
Azimuth Plot



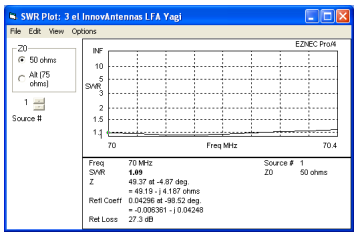
Elevation Plot



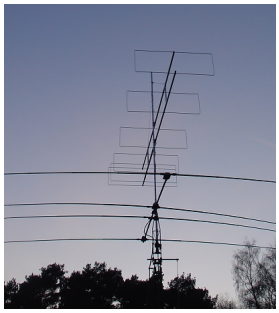
Single 3 element LFA up 10m above ground



2 x 3 el LFA Yagi 3.5m apart with the bottom antenna 10m above ground



SWR



A 6el 50Mhz LFA-Q at G3ZSS

Manufactured the right way, not the cheapest way!
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