# 7 element 50MHz LFA2 WOS Yagi (9.5m)



A super low-noise 7el WOS 50MHz LFA Yagi by G0KSC

Rating: Not Rated Yet **Price**Sales price £399.95

Sales price without tax £333.29

Ask a question about this product

Manufacturer<u>InnovAntennas</u>

Description

### Prices 20% less for customers outside of EU

A 7 element low-noise LFA2 Yagi Bent Element Yagi

The 7LFA2WOS was originally designed for G3WOS

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 7 element 50Mhz LFA2 is another exciting slant on the LFA design with both the last third of both the reflector and first director elements being bent towards the driver loop in order to enhance performance. Incredible levels of F/B have been achieved providing the ultimate in rear-end suppression.

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!



## A single 7el 50MHz WOS in use at VP8EME reflecting signals off of the Moon

One of out customers in Canada sent this comparison video switching between his conventionally optimised 7el 50MHz Yagi and our 7el WOS which were at the same height but separate towers. <u>SEE HERE</u>

#### **Performance**

12.90dBi @ 50.150MHz

30.74dB @ 50.150MHz

Peak Gain: 12.96dBi

Peak F/B: 33.75dB

Power Rating: 5kw

 $\textbf{SWR:} \ \text{Below 1.1:1 from 50.00MHz to 50.450MHz}$ 

Stacking Distance: 5.5 -7.5m ( 6.8m recommended)

2 Stacked Gain @ 6.8m spacing: 15.75dBi

2 Stacked F/B: 37.83dB

2 Stacked Gain @ 6.8m Spacing 10m above ground: 20.72dBi

**Boom Length:** 9.5m **Weight:** 15Kg / 33LB

Turning Radius: 4.974m / 16.3ft

Wind Loading: 0.36 Square Metres / 3.93 Square feet

Wind Survival:176KPH / 110MPH

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

## Specification

This antenna is made with tapered elements 16mm centres and 13mm 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. Boom is 2" (50mm) aluminum in the centre, tapering to 40mm with a 45mm section, all with 2mm booms. A boom guy system is provided with this antenna.

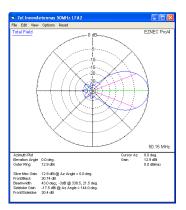
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what they should be, ensuring 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 <a href="https://example.com/here">here</a>

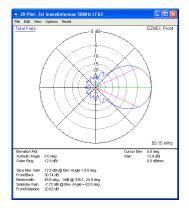
- Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- Mill finished boom and elements for highest levels of accuracy



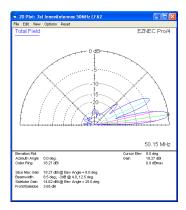
A 6 x 7el 50MHz WOS vertical stack at W7EL



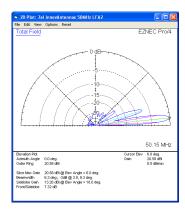
## **Azimuth Plot**



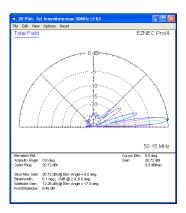
**Elevation Plot** 



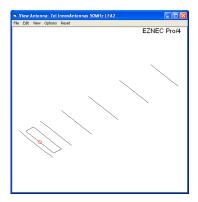
Single 7 element LFA2 up 10m above ground



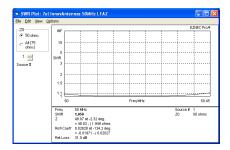
2 x 7 el LFA Yagi 6m apart with the bottom antenna 10m above ground



2 x 7 el LFA Yagi 6.8m apart with the bottom antenna 10m above ground



The 7el LFA2 element layout



# SWR



6 x 7el 50MHz WOS LFA2s at W7EW

Manufactured the right way, not the cheapest way!