



A Dualband 50/70MHz Yagi with single feedpoint

# 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

### An Excellent Dual Band Yagi for 50/70MHz with 6.4m boom

The 4-6-13 Dual Band Yagi has a total of 13 elements, 6 elements are used on 70MHz while 7 elements are used on 50MHz. The 4-6-13 InnovAntennas Dual Band Yagi stands aside from the crowd due to the methods used for it's design. The 4-6-13 uses no traps or coils, no phasing arrangements and has no need for 'compromise' spacing between elements as the antenna has a set of correctly spaced elements for either band but still deploys only one feed point. An excellent antenna with great SWR bandwidth and performance in one package.

#### Performance

Gain on 50MHz: 11.57dBi @ 50.150MHz F/B on 50MHz: 20.09dB @ 50.150MHz Gain on 50MHz at 10m above Ground: 16.98dBi Gain on 70MHz: 11.06dBi @ 70.200MHz F/B on 70MHz: 22.07dB @ 70.200MHz Gain on 70MHz at 10m above Ground: 16.70dBi Power Rating: 3kw SWR 50MHz: Below 1.1:1 from 50.00MHz to 50.500MHz SWR 70MHz: Below 1.4:1 from 69.900MHz to 70.500MHz Boom Length: 6.4m Weight: 7.58Kg / 16.72LB Turning Radius: 3.187m / 10.457ft Wind Loading: 0.245 Square Metres / 2.59 Square feet Wind Survival: 216KPH / 134MPH

#### Specification

This antenna is made with 1/2 inch (12.7mm) centre elements and 3/8 inch (9.525mm) outer elements (70MHz element are one piece 1/2 inch). 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 1.5 inch square 16SWG aluminum** and a **Kevlar boom guy** is supplied with **stainless steel** turnbuckles for final guy adjustment.

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 <u>here</u>

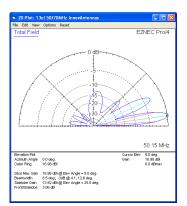
- Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- · Mill finished boom and elements for highest levels of accuracy



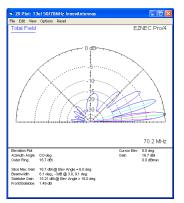
Azimuth Plot 50MHz



Azimuth Plot 70MHz



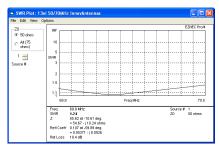
Elevation Plot 50MHz (10m above ground)



### Elevation Plot 70MHz (10m above ground)

File Edit View (	options									
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1	5 SWR									
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	2									
	1.5									
	14									
	50 Freq MHz								50.5	
		= 47.87 -	-1.24 deg. -j1.034 ohm at -153.51 d 85 -j0.0107	leg.				So ZO	rce# 1	50 ohms

## SWR 50MHz







The 4-6-13 element layout

Manufactured the right way, not the cheapest way! //