

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 5.4m boom

The 4-6-12 Dual Band Yagi has a total of 12 elements, 6 elements are used on 70MHz while 6 elements are used on 50MHz. The 4-6-12 InnovAntennas Dual Band Yagi stands aside from the crowd due to the methods used for it's design. The 4-6-12 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.



Above - the 12el installed at G7RAU

"I have attached a picture of the 12el Innov yagi for 6 and 4m I took in 2018:

The antenna has worked like a dream over the last 5 years, vswr 1:1 across 6 and 4 even when it rains. Antenna gain is excellent and I have no

intentions of changing it for the forseeable future. I have worked many DXCCs with it only using low power with the antenna doing all the work. It has withstood 100MPH+ winds and survived a house move!

73

Dave G7RAU"

Performance

Gain on 50MHz: 10.93dBi @ 50.150MHz

F/B on 50MHz: 19.85dB @ 50.150MHz

Gain on 50MHz at 10m above Ground: 16.4dBi

Gain on 70MHz: 11.80dBi @ 70.200MHz

F/B on 70MHz: 17.49dB @ 70.200MHz

Gain on 70MHz at 10m above Ground: 17.43dBi

Power Rating: 3kw

SWR 50MHz: Below 1.1:1 from 50.00MHz to 50.500MHz

SWR 70MHz: Below 1.2:1 from 69.950MHz to 70.600MHz

Boom Length: 5.4m

Weight: 12Kg

Turning Radius: 2.53m / 8.3ft

Wind Loading: 0.22 Square Metres / 2.42 Square feet

Wind Survival: 160KPH / 100MPH

Customer Report ON6ID:

"Hi Justin,

After two days of work the antenna is installed at 27 meters above ground. SWR is very good both on 6 and 4 meterband. Just waiting now for my first contact with this wonderful antenna.

I am a Optibeam fan but your antenna is regarding mechanical construction at the same level as Optibeam.

I send you some pictures from the antenna installed on a small pole for testing and also at the top of my tower.

It wasn't 2 days of work to install the antenna but at the same time I did some maintenance on the other antennas.

Greetings from Belgium

Hugo

ON6ID"

"Just checked the swr which seem to be very flat.

From 50.000 MHz till 50.500 MHz the swr is 1.1

From 70.000 MHz till 70.290 MHz 1.1 and from 70.290 till 70.500 MHz 1.2

so for me the antenna is working perfect...

Best 73's and a nice weekend.

Hugo ON6ID"



The 12el Duo @ ON8ID before installation on the tower



The 12el duo @ ON6ID above a 40m Rotating dipole and Optibeam HF Yagi

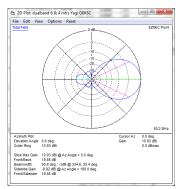
Specification

This antenna is made with 1/2 inch (12.7mm) centre elements and 3/8 inch (9.525mm) outer elements (70MHz elements 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**.

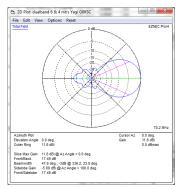
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what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

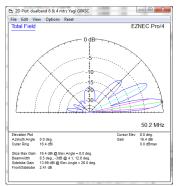
- Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- Mill finished boom and elements for highest levels of accuracy



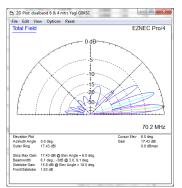
Azimuth Plot 50MHz



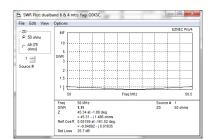
Azimuth Plot 70MHz



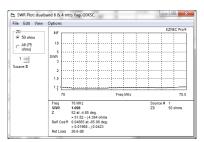
Elevation Plot 50MHz (10m above ground)



Elevation Plot 70MHz (10m above ground)



SWR 50MHz







Manufactured the right way, not the cheapest way! $\prime\prime$