

A Dualband 18/24MHz WARC band 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 18/24MHz with 10.8m boom

The 18-24-10 Dual Band Yagi has a total of 10 elements, 5 elements are used on 18MHz while 5 elements are used on 24MHz. The 18-24-10 InnovAntennas Dual Band Yagi stands aside from the crowd due to the methods used for its design. No traps or coils and no phasing arrangements are used within this antenna and there is 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 50 Ohm feed-point. An excellent antenna with great SWR bandwidth and performance in one package.

### Performance

Gain on 18MHz: 9.81dBi @ 18.110MHz

F/B on 18MHz: 18.02dB @ 18.110MHz

Gain on 18MHz at 15m above Ground: 14.83dBi

Gain on 24MHz: 9.82dBi @ 24.920MHz

F/B on 24MHz: 19.06dB @ 24.920MHz

Gain on 24MHz at 10m above Ground: 15.1dBi

Power Rating: 5kw

SWR 18MHz: Below 1.1:1 from 18.08MHz to 18.180MHz

SWR 24MHz: Below 1.1:1 from 24.88MHz to 25.00MHz

Boom Length: 10.9m

Weight: 23.74Kg / 53LB

Turning Radius: 4.935m / 16.1ft

Wind Load: 1.12 Square metres / 11.3 Square feet

Wind Survival: 160KPH / 100MPH

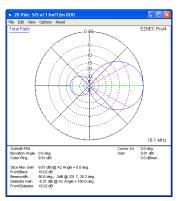
#### Specification

This antenna deploys elements tapering from 1 inch (25.4mm) to 1/2 inch (12.7mm) for 18MHz with elements starting at 3/4 inch (19.05mm) tapering through 3/8 inch (9.525mm) for 24MHz. 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 1.75 inch square 10SWG aluminum**.

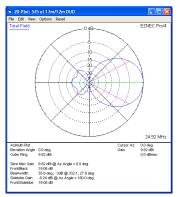
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used to measure the elements during production to help ensure the best possible results when installed.

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 has least effect on performance and pattern degradation. More information can be found <u>here</u>

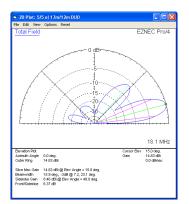
- Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- · Mill finished boom and elements for highest levels of accuracy



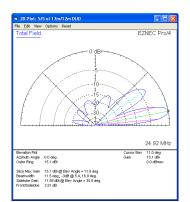
**Azimuth Plot 18MHz** 



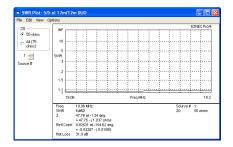
**Azimuth Plot 24MHz** 



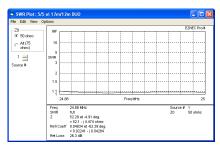
Elevation Plot 18MHz (15m above ground)



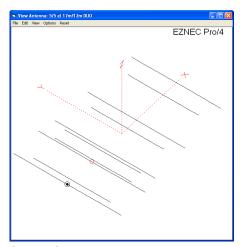
## Elevation Plot 24MHz (15m above ground)



## SWR 18MHz







Antenna Layout

Manufactured the right way, not the cheapest way!  ${\ensuremath{\textit{//}}}$