

## A Wideband 14MHz OP-DES Yagi



# **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 Heavy Duty 4 element 14MHz OWA (Optimised Wideband Array) Yagi

The OWA is one of the traditional HF antennas to have if you are looking for wide band, stable performance. The HD Version is made with 4 stage tapered elements starting at 1.25 inch (32mm) tapering down to 5/8 inch (15.88mm) at the tips. InnovAntennas use the latest in Electromagnetic Design Technology to ensure the very best results and the InnovAntennas OWA Yagi is proof of that!

This antenna has a flat SWR curve covering 14.000 - 14.350MHz at 1.1:1 SWR.

Performance

Gain: 8.87dBi @ 14.150MHz

**F/B:** 17.21dB @ 14.150MHz

Peak Gain: 8.98dBi

Gain at 20m above Ground: 14.03dBi

Peak F/B: 18.12dB

Power Rating: 5kw

**SWR:** Below 1.1:1 from 14.000MHz to 14.350MHz

Boom Length: 9.8m

Stacking Distance: 9 - 15.5m ( 10m recommended)

2 Stacked Gain @ 10m spacing: 11.13dBi

2 Stacked F/B: 20.87dB

2 Stacked Gain @ 10m Spacing 20m above ground: 16.10dBi

Weight: 25.74Kg / 56.74LB

Turning Radius: 7.254m / 23.8ft

1 / 1

Wind Loading: 0.84 Square Metres / 9.08 Square feet

Wind Survival: 160KPH+ / 100MPH+

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

#### Specification

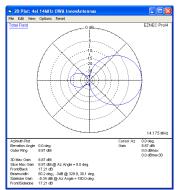
This antenna is made with 1.25 inch (31.8mm) tube tapering to 1 inch (25.4mm) tube followed by 3/4 inch (22.25mm) and 5/8 inch (15.88mm) outer elements with. The antenna has fully insulated elements which will ensure continuous, high performance for many years to come. Boom to mast brackets are included with all antennas which will support 2 inch (50mm) (larger available upon request) masts. Boom is 1.75 inch square 10SWG (3.2mm wall) aluminum with Kevlar boom guys and stainless steel turnbuckles for guy adjustment. Wind loading over 100MPH.

## OTHER TAPER SCHEDULES ARE AVAILABLE IN THIS ANTENNA, CALL OR EMAIL FOR DETAILS

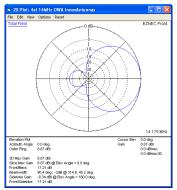
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what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

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

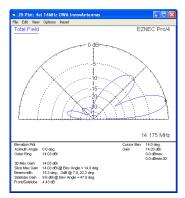


**Azimuth Plot** 

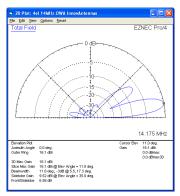


**Elevation Plot** 

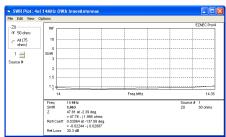
2 / 3



Single 4 element OWA up 20m above ground



2 x 4 el OWA Yagi 10m apart with the bottom antenna 20m above ground



SWR

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

 $^{\star}$  Where possible marine grade stainless steel components are used  $/\!/$ 

3 / 3