

Best 14MHz Yagi - 5el 15.5m boom



## **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 5 element wideband 14MHz OP-DES (Opposing Phase Driven Element System) Yagi

The OP-DES is the newest in patent technology produced by InnovAntennas and is specifically designed for maximum performance, wide-band HF applications. Read more about the OP-DES Yagi Here. InnovAntennas use the latest in Electromagnetic Design Technology to ensure the very best results and the OP-DES Yagi is proof of that!

This antenna has a flat SWR curve covering 14.000 - 14.350MHz at better than 1.5:1 SWR.

#### **Performance**

Gain: 10.70dBi @ 14.150MHz; 10.88dBi @14.250MHz

F/B: 20.68dB @ 14.150MHz

Peak Gain: 10.9dBi

Gain at 20m above Ground: 15.85dBi

Peak F/B: 21.02dB

Power Rating: 5kw+

**SWR:** Below 1.5:1 from 14.000MHz to 14.350MHz

Boom Length: 15.550m
Weight: 51Kg / 113LB

Turning Radius: 9.540m / 31.4ft

Wind Loading: 1.21 Square Metres / 13 Square feet

Wind Survival: 175KPH / 109MPH

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

Stacking Distance: 15 - 18m (17.5m recommended)

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2 Stacked Gain @ 17.5m spacing: 14.11dBi

2 Stacked F/B: 25.42dB

2 Stacked Gain @ 17.5m Spacing 20m above ground: 18.55dBi

Wind loading: call for details

#### Specification

This antenna is made with 7/8 inch (22.23mm) tube tapering to 3/4 inch (19.05mm) tube followed by 5/8 inch (15.88mm) and 1/2 inch (12.7mm) outer elements with the OP-DES end sections 3/8 inch (9.525mm). 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 3 inch (76.2mm) masts. **Boom 3 inch square 10SWG (3.2mm wall)** aluminum with Kevlar boom guys and stainless steel turnbuckles for guy adjustment.

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

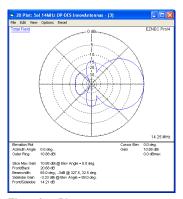
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used for VHF/UHF (with an accuracy of .01mm) to measure the elements during production to ensure they are within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

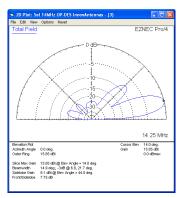


**Azimuth Plot** 

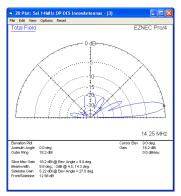


**Elevation Plot** 

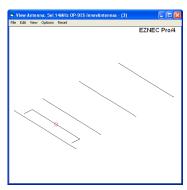
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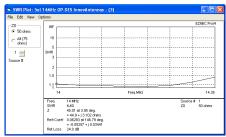
Single 5 element OP-DES up 20m above ground



2 x 5 el OP-DES Yagi 17.5m apart with the bottom antenna 20m above ground



The 5el 14MHz OP-DES Element Layout - how the OP-DES Yagi looks



SWR

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

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