

A Wideband 50MHz 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 5 element wideband 50-51.35MHz OP-DES (Opposing Phase Driven Element System) Yagi 5-OP-KOM - NEW! Second Generation OP-DES Yagi!

The OP-DES is the newest in patent technology produced by InnovAntennas and is specifically designed for maximum performance, wide-band 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 50-51.350MHz at 1.1:1 SWR. The super-compact 5el is a tiny antenna with a huge punch, Take a look!



The 5el 50MHz OP-DES

Performance

Gain: 9.16dBi @ 50.150MHz

F/B: 35.43dB @ 50.150MHz

Peak Gain: 9.22dBi

\_ . . . . . \_ \_

Gain at 10m above Ground: 14.7dBi

Peak F/B: 36.10dB

Power Rating: 5kw

SWR: Below 1.1:1 from 50.000MHz to 51.350MHz

Stacking Distance: 3.5-4.3m ( 3.8m recommended)

2 Stacked Gain @ 3.8m spacing: 12.00dBi

2 Stacked F/B: 34.74dB

2 Stacked Gain @ 3.8m Spacing 10m above ground: 17.38dBi

Boom Length: 2.640m

Weight: 4Kg/8.8LB

Turning Radius: 1.978m / 6.5ft

Wind Loading: 0.18 Square Metres / 1.95 Square feet

Wind Survival: 261KPH / 134MPH

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

## **Specification**

This antenna is made **16mm** centre elements and **13mm** outer elements with the OP-DES end sections **10mm**. 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 35mm square aluminum with a 2mm thick wall.

## OTHER TAPER SCHEDULES ARE AVAILABLE FOR 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.

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>

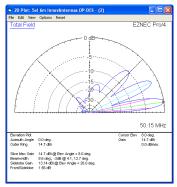
- · Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- · Mill finished boom and elements for highest levels of accuracy



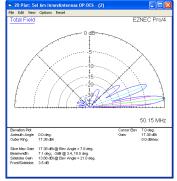
**Azimuth Plot** 



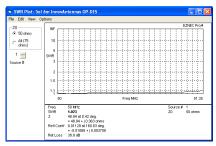
**Elevation Plot** 



Single 5 element OP-DES up 10m above ground



 $2\ x\ 5el\ OP\text{-DES}\ Yagi\ 3.8m$  apart with the bottom antenna 10m above ground



SWR



How the OP-DES looks; A 6el 10m OP-DES

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