

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

An 8 element wideband 50-50.5MHz OP-DES (Opposing Phase Driven Element System) Yagi - 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 50.0-50.50MHz at 1.1:1 SWR. The super 8el has incredible rearward suppression and a huge punch too, Take a look!



4 x 8el OP-DES Yagi @ G8BCG



A single 8el 50MHz OP-DES @ I2HBW

## **Customer Comments:**

"Hi Justin,

I offer the following anecdote and with a request of help and advice.

Last September I arranged with you to acquire a 6m 8el OP-DES antenna. The antenna assembled easily and went to the top of my tower within a few weeks after arrival here in Arizona. It has been up at 90 feet for the past many months with great success.

In the time I have had it up I have achieved the following on 6m:

WAS

493 grids worldwide

331 grid within the US 48

56 DXCC countries

23 cq zones

.. and the most recent achievement was a successful 6m EME contact with N0TB and a near miss with a station in Japan. See attached screenshot of the N0TB QSO.

I have received email from European stations telling me I was the only signal from North America they could hear on 6m FT8. I have put Vietnam in the log too. I joke that I am doing meteor scatter with MSK144 off of dust.

All I can say is what an outstanding antenna!

All the best,

Chuck

de NJ6D / N7KU "

#### Performance

Gain: 13.13dBi @ 50.150MHz

F/B: 32.00dB @ 50.150MHz

Peak Gain: 13.20dBi

Gain at 10m above Ground: 18.49dBi

Peak F/B: 32.89dB
Power Rating: 5kw

**SWR:** Below 1.1:1 from 50.00MHz to 50.50MHz

Stacking Distance: 6.0-6.9m ( 6.5m recommended)

2 Stacked Gain @ 6.5m spacing: 15.88dBi

2 Stacked F/B: 37.40dB

2 Stacked Gain @ 6.5m Spacing 10m above ground: 20.87dBi

Boom Length: 9.920m
Weight: 18Kg / 40LB

Turning Radius: 5.186m / 17.0ft

Wind Loading: 0.44 Square Metres / 4.78 Square feet

Wind Survival: 203KPH / 127MPH

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

### Specification

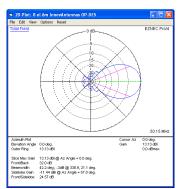
This antenna is made with 5.8 inch (15.88mm) centre elements and 1/2 inch (1.27mm) outer elements with the OP-DES end sections 3/8 inch (9.525mm). The antenna has fully insulated elements which will ensure continuous, high performance for many years to come. Boom to mast brackets are included with all antennas which will support 2 inch (50mm) masts. Boom is 1.75 inch (44.45mm) square 10 SWG aluminum (3.2mm 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, 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 <a href="https://example.com/here">here</a>

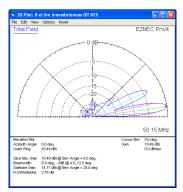
- · Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- · Mill finished boom and elements for highest levels of accuracy
- · Guy support hardware is supplied with this antenna



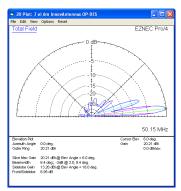
**Azimuth Plot** 



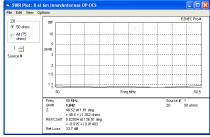
**Elevation Plot** 



Single 8 element OP-DES up 10m above ground



2 x 8el OP-DES Yagi 6.5m apart with the bottom antenna 10m above ground



SWR



How the OP-DES looks; A 6el 28MHz OP-DES with single taper boom  $/\!/$