

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 3 element wideband 14MHz OP-DES (Opposing Phase Driven Element System) Yagi

Unique double setup feature - set elements for maximum gain with less F/B (full band coverage) or a little less gain with lots of F/B (full band coverage). You choose and can change any time!

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 1.3:1 SWR.

"Hi Justin,

Thank you, It's been fantastic. Assembly is straight forward and easy to tune, also mechanically well thought out. Performance has exceeded my expectations. We've been using it as our portable special event 20m beam on a 45ft tower trailer. I've never had a problem holding a run frequency with this beam in North American contests, and our hourly QSO rate increase over previous year's 20m beams is significant. Please find photos attached/below from ARRL field day 2018 where we ran as N6F."



Customer comment:

"With the 3el OP-DES 14mhz I had a lot of fun, nothing to envy to the great European teams for the size and for the small number of elements is really directive, which is why I decided to take another one for the direction of Europe to break without having to roast the rotor, in the last cqww ssb at the last minute I had the chance to remotely broadcast SO 20m LP 100w pep from Icom 706MKIIG ... once again got me doing 1300 qso and nice pileups with the USA. Sal IZ2WFL"

Performance

Gain: 7.46dBi @ 14.150MHz

F/B: 13.5dB @ 14.150MHz

Peak Gain: 7.52dBi

Gain at 20m above Ground: 12.66dBi

Peak F/B: 14.2dB

Power Rating: 5kw

SWR: Below 1.3:1 from 14.000MHz to 14.350MHz

Boom Length: 4.2m

Weight: 12.79Kg / 28.19LB

Turning Radius: 5.790m / 18.86ft

Wind Loading: 0.63 Square Metres / 6.81 Square feet

Wind Survival: 160KPH / 100MPH **(125MPH version available upon request)**

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

Stacking Distance: 9 - 12m (11m recommended)

2 Stacked Gain @ 11m spacing: 10.49dBi

2 Stacked F/B: 12.18dB

2 Stacked Gain @ 11m Spacing 20m above ground: 15.16dBi

Specification

This antenna is made with 35mm tube tapering to 13mm at the tips (10mm driven element 'L' shaped section). This 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 as standard, larger upon request. Boom is 45mm square 2mm wall aluminum.

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 [here](#)

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



3el OP-DES for 14MHz ready to install at DL5ME

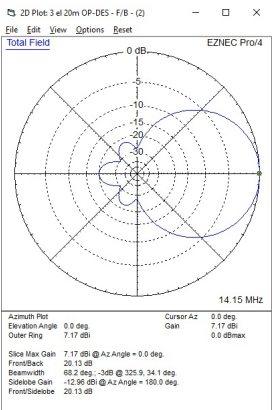


3el 20M OP-DES installed in 'JA'

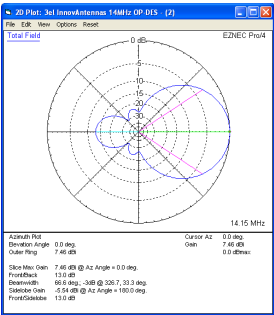
Two figurations below, high F/B version or high Gain version:

High F/B configuration with 7.17dBi forward Gain

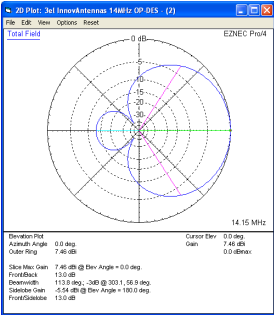
14MHz Yagis (All): 3 element 14MHz OP-DES Yagi (4.2m)



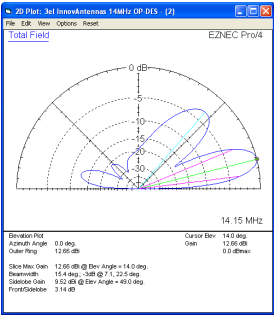
High gain version with 7.46dBi gain



Azimuth Plot

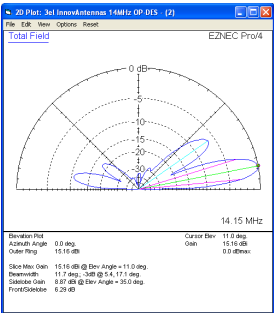


Elevation Plot

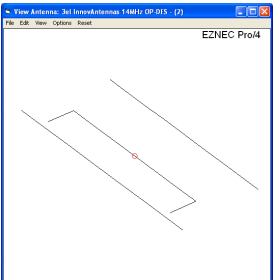


Single 3 element OP-DES up 20m above ground

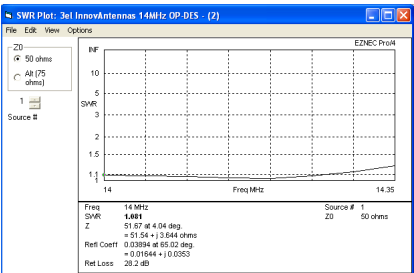
14MHz Yagis (All): 3 element 14MHz OP-DES Yagi (4.2m)



2 x 3el OP-DES Yagi 11m apart with the bottom antenna 20m above ground



The 3el 14MHz OP-DES Element Layout - how the OP-DES Yagi looks



SWR

Manufactured the right way, not the cheapest way!

* Where possible marine grade stainless steel components are used

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