



A Wideband High Performance 14MHz OP-DES Yagi 2018 model



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.

View all plots below to see how this antenna maintains 'Pattern Stability' throughout the 20m band with at least 24dB F/B !!



5el OP-DES @ IN3TWX



2 x 5el 20m OP-DES at OT4A

Performance

Gain: 9.14dBi @ 14.150MHz

F/B: 29.78dB @ 14.150MHz

Peak Gain: 9.3dBi

Gain at 20m above Ground: 14.28dBi

Peak F/B: 30.67dB

Power Rating: 5kw+

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

Boom Length: 9.3m

Weight: 37.5Kg

Turning Radius: 7.254m / 11.39ft

Wind Loading: 1.06 Square Metres / 8.58 Square feet

Wind Survival: 110MPH **(A 125MPH version available upon request)**

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

Stacking Distance: 11 - 15m (13m recommended)

2 Stacked Gain @ 13m spacing: 14.31dBi

2 Stacked F/B: 25.42dB

2 Stacked Gain @ 13m Spacing 20m above ground: 18.85dBi

Wind loading: call for details

Specification

This antenna is made with 32mm diameter elements tapering to 16mm at the element tips. 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 (51mm) masts. Boom 51mm tapering to 45mm aluminum with 3.2mm wall thickness. 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).

20m 14MHZ Yagi - DX Yagi Contest Yagi 14MHZ

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](#)

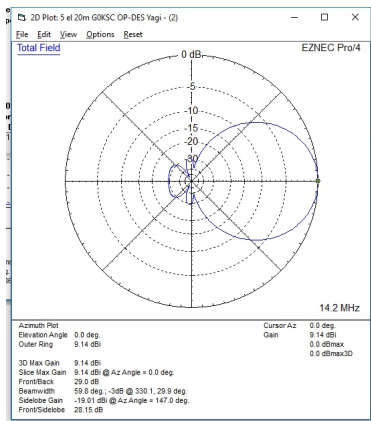
- Marine grade Stainless Steel Fittings*
- Original Stauff Insulation clamps
- Mill finished boom and elements for highest levels of accuracy

Note that the OP-DES is not just wideband with SWR characteristics, it holds performance across the whole of 20m, does your existing antenna do so?

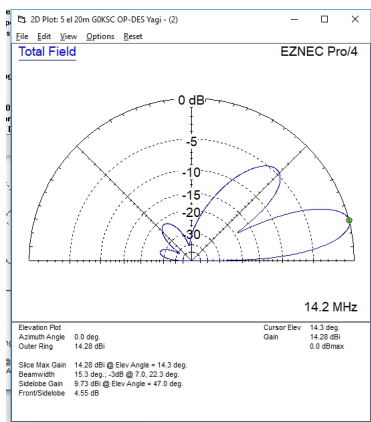


A 6el 20m OP-DES being installed at K5RC

'The 6el OP-DES 20 is now 1.01:1 from 14.000 to 14.300 and rises to 1.07:1 at 14.350.'

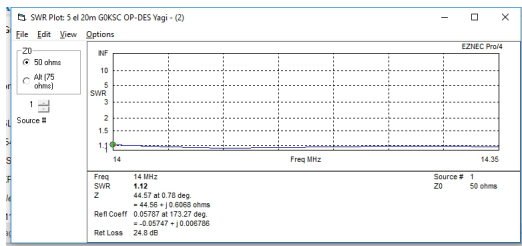


Azimuth Plot 14.0MHz



Single 5 element OP-DES up 20m above ground

20m 14MHz Yagi - DX Yagi Contest Yagi 14MHZ



SWR



2 x 5el OP-DES 20m Stack @ OT4A



5el OP-DES at VK4NDX



2 x 5el OP-DES Stack for 20m at OH6MW

Manufactured the right way, not the cheapest way!

* Where possible marine grade stainless steel components are used1.

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