

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 4 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 <u>OP-DES Yagi Here</u>. InnovAntennas use the latest in <u>Electromagnetic Design Technology</u> 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 1.5:1 SWR.

Performance

Gain: 9.23dBi @ 14.250MHz

Gain: 9.12dBi @ 14.150MHz

F/B: 25.84dB @ 14.150MHz

Peak Gain: 9.53dBi

Gain at 20m above Ground: 14.40dBi

Peak F/B: 26.12dB

Power Rating: 5kw

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

Boom Length: 8.2m

Weight: 24.21Kg / 53.4LB

Turning Radius: 6.740m / 22.15ft

Wind Loading: 0.81 Square Metres

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

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

Stacking Distance: 10 - 15.5m (13m recommended)

2 Stacked Gain @ 13m spacing: 11.92dBi

2 Stacked F/B: 24.22dB

2 Stacked Gain @ 13m Spacing 20m above ground: 16.90dBi

Specification

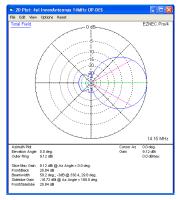
This antenna is made with 1.25 inch (32.1mm) tube tapering to 3/8 inch (9.525mm) at the tips. The antenna has fully insulated elements which will ensure continuous, high performance for many years to come. Boom to mast brackets are included with all antennas which will support 2 inch (50mm) masts standard, larger upon request. Boom is 1.75 inch square 10SWG (3.2mm wall) aluminum with Kevlar boom guys and stainless steel turnbuckles for guy adjustment. wind loading up to 100MPH.

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

Our antennas are constructed with the best quality materials in order 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 <u>here</u>

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



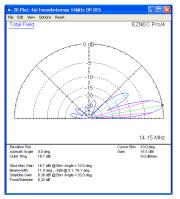




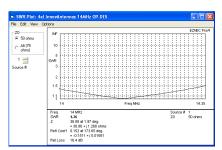
Elevation Plot



Single 4 element OP-DES up 20m above ground



2 x 4 el OP-DES Yagi 13m apart with the bottom antenna 20m above ground



SWR



A 6el HF OP-DES

Manufactured the right way, not the cheapest way!

 * Where possible marine grade stainless steel components are used ${\it //}$