

A low-noise 27MHz/28MHz 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 26.5-28.5MHz OP-DES (Opposing Phase Driven Element System) Yagi - NEW! 2023 version with full 2MHz coverage!

Additionally to the above, this antenna can be set for 26-28MHz or 28-30MHz

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!

The OP-DES offers incredible wide-band performance with a flat SWR from 27-28MHz. No matching devices, coils or traps so ALL your power gets to the antenna and radiated !!

This antenna has a flat SWR curve covering 26.5-28.500MHz better than 1.5:1 SWR.

(Adjustment settings provided to give coverage 26.0MHz to 28.0MHz or 28.0MHz to 30MHz)



Customer measured SWR result

Performance (2023 spec)

Gain: 7.2dBi @ 27.500MHz F/B: 20.44dB @ 27.500MHz Peak Gain: 7.50dBi Gain at 10m above Ground: 12.64dBi Peak F/B: 21.23dB Power Rating: 5kw SWR: Below 1.5:1 across 2MHz (Can be adjusted for 26-28MHz or 28-30MHz) Stacking Distance: 5.0-6.5m (6.0m recommended) 2 Stacked Gain @ 6.0m spacing: 10.51dBi 2 Stacked F/B: 12.20dB 2 Stacked Gain @ 6.0m Spacing 10m above ground: 15.43dBi Boom Length: 2.1m Weight: 4.84Kg / 10.67LB Turning Radius: 3.34m / 10.96ft Wind Loading: 0.22 Square Metres / 2.37 Square feet Wind Survival: 160KPH / 100MPH (125MPH version available upon request) Other options available if higher wind loading/survival is required.



Customer installation



Up close to the feed point with a current balun (InnovAntennas Ferrite Core Balun) installed

Specification - NEW HD Sizing for 2023/4

This antenna is made 3/4 inch (19.05mm) centre elements followed by two tapers - 5/8" (15.9mm) then 1/2 inch (12.7mm) 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 1.5 inch square (38.1mm) 16SWG aluminum.

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.

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

Manufactured the right way, not the cheapest way! $\ensuremath{\textit{//}}$