

A 5 element Wideband 27Mhz, 28MHz, 29MHz Dual-Band OP-DES Heavy Duty 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 5 element wideband 27-29MHz\* OP-DES (Opposing Phase Driven Element System) The First Dualband 10m/11m Yagi - NEW! Second Generation OP-DES Yagi!

The OP-DES is the newest Yagi produced by InnovAntennas and is specifically designed for maximum performance, wide-band applications. Read more about the <a href="OP-DES Yagi Here">OP-DES Yagi Here</a>. InnovAntennas use the latest in <a href="Electromagnetic Design Technology">Electromagnetic Design Technology</a> to ensure the very best results and the OP-DES Yagi is proof of that!

This antenna has a flat SWR curve **covering 27-29MHz** at less than 1.5:1 SWR. Bandwidth can be easily moved to cover two other ranges if the standard does not suit, **26.5MHz** to **28.5MHz** or **27.5Mhz** to **29.5MHz**. The super-compact 5el is a tiny antenna with a huge punch, Take a look!

Customer Build video showing construction HERE:



The 5el OP-DES covering all of 10m (28MHz to 30MHz) @ 2E1RDX

### "Hi Justin

just a quick update on the 5 ele short boom 28Mhz Op Des I am having a ball working loads of DX in the past couple of weeks running 50w not the pretend around 50w but actually 50w. I wkd VU2XO, EX2V,EY7AD, V31XX,UK8OM, 9N7AA,3X1AJT1BV, 9J2BO, ZF2OO, JE3WUK,4S7AB,JH0BBE,HL2UPJA2BIV,VR2UPQ I won't go on but loads of Caribbean, Central America, Africa, Far East, Asia, more DX than I imagined possible and all this with a 4.7M boom and never higher than 45ft normally less I am delighted with the antenna everything as promised great SWR great build quality very happy with your company from start to finish.

feel free to use the above and make any changes you like to it I am so happy with it I am looking at a project to put a 6 ele on the air can you

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build Me a 6 ele with the 9.3M boom product code 28-DES-6A. also please add the 3KW Balun attached are a couple of pics of the Op Des for use if required with My Wellbrook loop mounted above

many thanks Ian 2E1RDX"

#### Performance

Gain: 9.13dBi @ 28.00MHz, 8.83dBi @ 27.00MHz, 9.68dBi @ 29.00MHz

F/B: 27.93dB @ 28.00MHz, 24.56dB @ 27.00MHz, 29.51dB @ 29.00MHz

Peak Gain: 9.68dBi

Gain at 10m above Ground: 14.21dBi @ 28.00MHz

Peak F/B: 52.77dB @27.5MHz

Power Rating: 5kw+

**SWR:** Below 1.5:1 from 27.0MHz to 29.0MHz\*

Coverage is the full 2Mhz between 27Mhz and 29Mhz

Stacking Distance: 6.0-7.5m (7m recommended)

2 Stacked Gain @ 7m spacing: 12.07dBi

2 Stacked F/B: 24.98dB

2 Stacked Gain @ 7m Spacing 10m above ground: 16.84dBi

Boom Length: 4.840m

Weight: 8.5KG / 18.74LB

Turning Radius: 3.43m / 11.27ft

Wind Loading: 0.37 Square Metres

Wind Survival: 125MPH (HD) version is standard

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

#### **Specification**

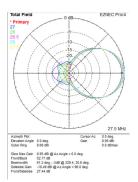
This antenna is made HD as standard with 1 inch (25.4mm) which taper to 1/2 inch (12.7mm) tips. The antenna has fully insulated elements which will ensure continuous, high performance for many years to come. Boom to mast brackets are included with all antennas which will support 2 inch (50mm) masts. For other diameters, please ask! Boom is 1.5 inch (38mm) square 16SWG aluminum as standard but can be upgraded if the customer requires it.

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

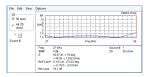
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what 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



# Azimuth plots from 27MHz to 29MHz



SWR



How the OP-DES looks; A 5el 10m/11m OP-DES

Manufactured the right way, not the cheapest way

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