

A Wideband 26-28MHz OP-DES Yagi by InnovAntennas first Dual-band 27/28MHz



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 **26.8-28.6MHz** 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!

The OP-DES provides a near-perfect 50 Ohm impedance over a very wide range **without** the requirement of 'lossy' and pattern impacting matching devices.

The OP-DES offers incredible wide-band performance with a flat SWR from 26.8-28.6MHz. No matching devices, coils or traps so ALL your power gets to the antenna and radiated!!

Customer comment:

'So now the SWR is 1.4 on 28.600 And below 1.5 all the way down to 26.800 :) Encloses some pictures you are free to use for sharing The best Yagi I ever had :) Gary 21AT114'

Customer Build Video showing construction [HERE](#):



The 26-28Mhz 5el OP-DES at 21AT114

Performance

Gain: 9.36dBi @ 27.300MHz

F/B: 28.6dB @ 27.300MHz

Peak Gain: 9.44dBi

Gain at 15m above Ground: 14.81dBi

Peak F/B: 28.91dB

Power Rating: 10kw

SWR: Below 1.4:1 from 27.000MHz to 27.800MHz (can be adjusted from 26MHz to 28MHz to suite users preference)

Stacking Distance: 4.5-8m (7m recommended)

2 Stacked Gain @ 7m spacing: 12.11dBi

2 Stacked F/B: 21.89dB

2 Stacked Gain @ 7m Spacing 15m above ground: 17.32dBi

Boom Length: 5.34m

Weight: 8.32Kg / 18.32LB

Turning Radius: 3.76m / 12.33ft

Wind Loading: 0.42 Square Metres / 4.56 Square feet

Wind Survival: 177KPH / 110MPH

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

Specification

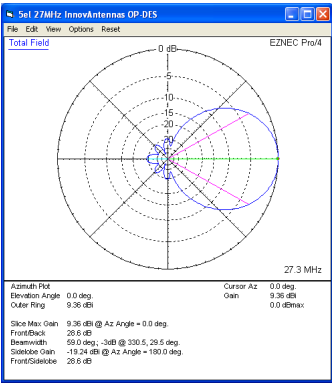
This antenna is made 5/8 inch (15.88mm) centre elements and 1/2 inch (12.7mm) outer elements with the OP-DES end sections 3/8 inch (9.525mm). The antenna has fully insulated elements which will ensure continuous, high performance for many years to come. Boom to mast brackets are included with all antennas which will support 2 inch (50mm) masts. Boom is 1.5 inch square 16SWG aluminum.

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

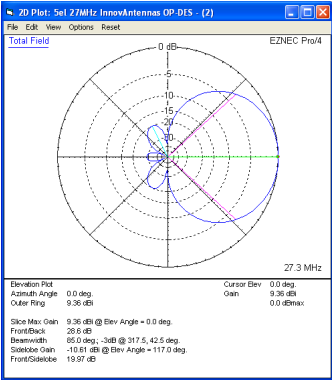
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what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

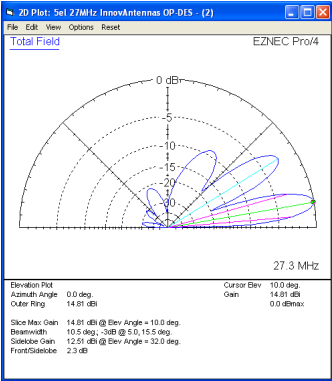
- **Marine grade Stainless Steel Fittings**
- **Original Stauff Insulation clamps**
- **Mill finished boom and elements for highest levels of accuracy**



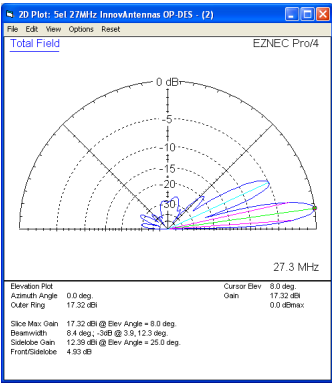
Azimuth Plot



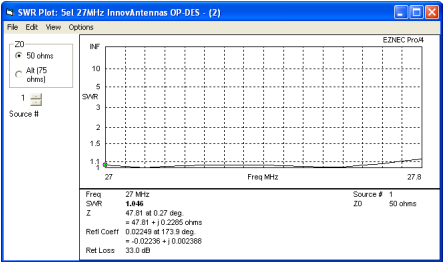
Elevation Plot



Single 5 element OP-DES up 15m above ground



2 x 5el OP-DES Yagi 7m apart with the bottom antenna 15m above ground



SWR



A 6el 27MHz OP-DES installed in Norway

Manufactured the right way, not the cheapest way!
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