

A Wideband 70MHz 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](http://www.dxengineering.com) - [www.wimo.com](http://www.wimo.com)

**A 7 element wideband 69.90-70.70MHz OP-DES (Opposing Phase Driven Element System) Yagi - Second Generation OP-DES Yagi !**

The OP-DES is the newest in patent technology produced by InnovAntennas and is specifically designed for maximum performance, wide-band 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 69.90-70.70MHz at 1.1:1 SWR. This compact 7el is a small antenna with a huge punch, Take a look!

### Performance

**Gain:** 12.39dBi @ 70.200MHz

**F/B:** 28.37dB @ 70.200MHz

**Peak Gain:** 12.51dBi

**Gain at 10m above Ground:** 18.02dBi

**Peak F/B:** 29.86dB

**Power Rating:** 5kw

**SWR:** Below 1.1:1 from 69.900MHz to 70.700MHz

**Stacking Distance:** 3.9-5.0m ( 4.6m recommended)

**2 Stacked Gain @ 4.6m spacing:** 15.32dBi

**2 Stacked F/B:** 30.77dB

**2 Stacked Gain @ 4.6m Spacing 10m above ground:** 20.64dBi

**Boom Length:** 5.390m

**Weight:** 5.3Kg / 11.7LB

**Turning Radius:** 2.769m / 8.86ft

**Wind Loading:** 0.14 Square Metres / 1.5 Square feet

**Wind Survival:** 209KPH / 130MPH

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

## Specification

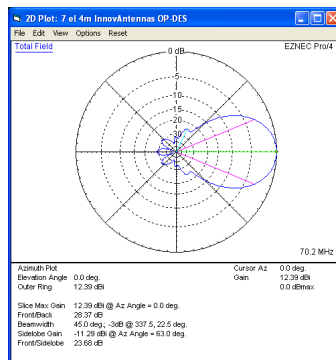
This antenna is made with 1/2 inch (12.7mm) centre elements and 3/8 inch (9.525mm) outer elements with the OP-DES end sections 3/8 inch (9.525mm). The antenna has fully insulated elements which will ensure continuous, high performance for many years to come. Boom to mast brackets are included with all antennas which will support 2 inch (50mm) masts. Boom is 1.5 inch (32mm) square 16SWG aluminium.

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

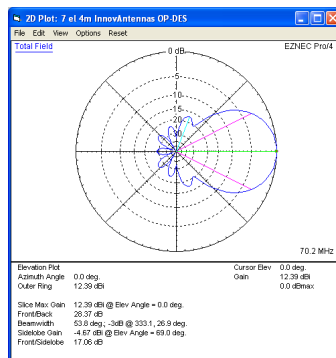
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what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

- **Marine grade Stainless Steel Fittings**
- **Original Stauff Insulation clamps**
- **Mill finished boom and elements for highest levels of accuracy**
- **A Kevlar Guy system is supplied with this antenna**
- **Dual Antenna Baluns are supplied with this antenna**

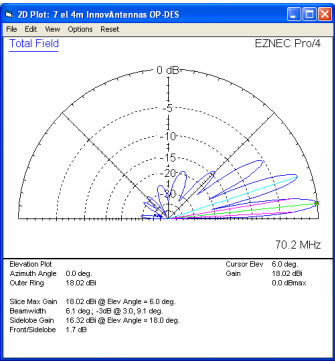


**Azimuth Plot**

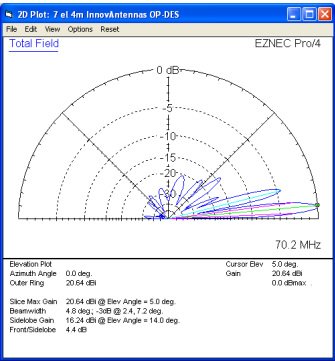


**Elevation Plot**

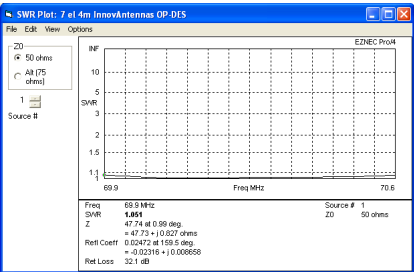
70MHz Yagis (all): 7 element 70MHz OP-DES Yagi (5.3m)



Single 7 element OP-DES up 10m above ground



2 x 7el OP-DES Yagi 4.6m apart with the bottom antenna 10m above ground



SWR



How the OP-DES looks; A 6el 10m OP-DES

Manufactured the right way, not the cheapest way!

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