



A compact 50MHz OWL Yagi by G0KSC

Description

Available through [WiMo Germany](http://www.wimo.com) and [DX Engineering in the USA](http://www.dxengineering.com) - for Direct factory supply, Email us for pricing and time lines.

www.dxengineering.com - www.wimo.com

A 3 element compact OWL Yagi



3el OWL with rear mount option shown above

The OWL combines performance and light-weight in one package. Designed for portable use and where there is simply not enough space for a 6m Yagi, this antenna really delivers a punch with just a tiny boom length of just 1.2m (under 4 feet).

The OWL uses an adjustable folded dipole system and has a direct 50 Ohm feed point, no matching device (or associated losses) being the result.

Performance

7.67dBi @ 50.150MHz

17.25dB @ 50.150MHz

Peak Gain: 7.72dBi

Gain at 10m above Ground: 13.26dBi @ 50.150MHz

Peak F/B: 18.44dB

Power Rating: 5kw

SWR: Below 1.3:1 from 50.00MHz to 50.400MHz

Stacking Distance: 2.5-3.6m (3.3m recommended)

2 Stacked Gain @ 3.3m spacing: 10.61dBi

2 Stacked F/B: 14.41dB

2 Stacked Gain @ 3.3m Spacing 10m above ground: 16.07dBi

Boom Length: 1.2m

Weight: 2Kg / 4.4LB

Turning Radius: 1.643m / 5.39ft

Wind Loading: 0.16 Square Metres / 1.37 Square feet

Wind Survival: 253KPH / 157MPH

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

REAR MOUNT AVAILABLE UPON REQUEST AND REQUIRED FOR VERTICAL MOUNTING

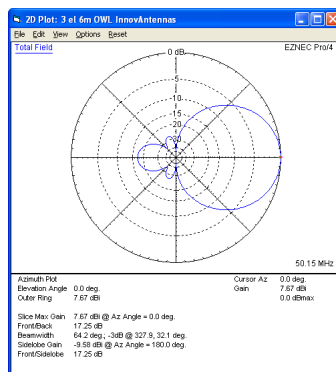
Specification

This antenna is made 1/2 inch (12.7mm) centre elements and 3/8 inch (9.525mm) outer elements (centre sections of the driven element are 5/8"). The antenna has fully Built on a 1" square aluminium boom with elements passing through (and bolted to) the boom.

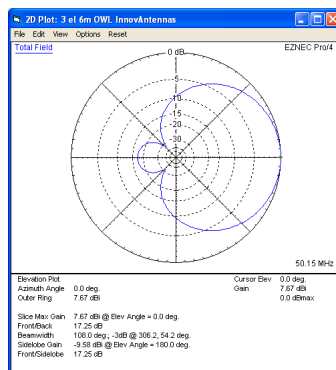
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used (with an accuracy of .01mm) to measure the elements during production to ensure they are within 0.2mm of what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

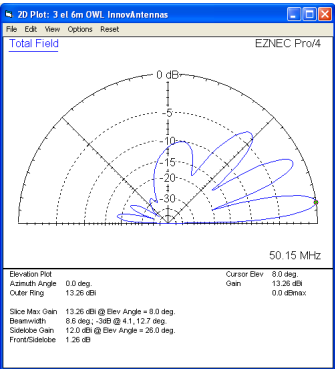


Azimuth Plot

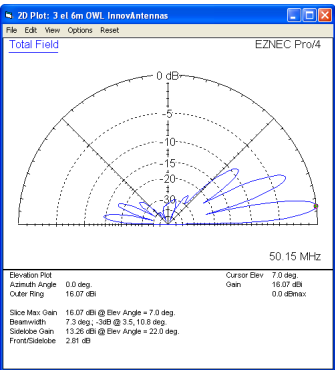


Elevation Plot

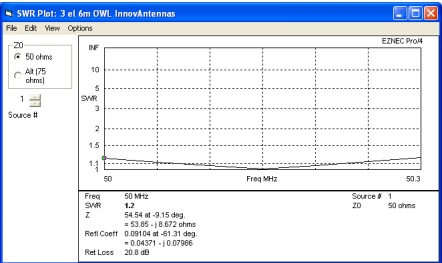
3el 50MHz OWL Yagi by G0KSC



Single 3 element LFA up 10m above ground



2 x 3 el LFA Yagi 3m apart with the bottom antenna 10m above ground



SWR



3el OWL for 50MHz



Through-boom elements for super-light wieght construction

Manufactured the right way, not the cheapest way!

//