

A Dualband 18/24MHz WARC band Yagi with single feedpoint

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

An Excellent Dual Band Yagi for 18/24MHz with 7.2m boom

The 18-24-8 Dual Band Yagi has a total of 8 elements, 4 elements are used on 18MHz while 4 elements are used on 24MHz. The 18-24-8 InnovAntennas Dual Band Yagi stands aside from the crowd due to the methods used for its design. No traps or coils and no phasing arrangements are used within this antenna and there is no need for 'compromise' spacing between elements as the antenna has a set of correctly spaced elements for either band but still deploys only one 50 Ohm feed point. An excellent antenna with great SWR bandwidth and performance in one package.

Performance

Gain on 18MHz: 8.88dBi @ 18.110MHz

F/B on 18MHz: 17.82dB @ 18.110MHz

Gain on 18MHz at 15m above Ground: 13.97dBi

Gain on 24MHz: 8.59dBi @ 24.920MHz

F/B on 24MHz: 16.77dB @ 24.920MHz

Gain on 24MHz at 10m above Ground: 14.0dBi

Power Rating: 5kw

SWR 18MHz: Below 1.1:1 from 18.08MHz to 18.180MHz

SWR 24MHz: Below 1.3:1 from 24.88MHz to 25.00MHz

Boom Length: 7.23m

Weight: 18.2Kg / 40Lbs

Turning Radius: 4.593m / 15.1ft

Wind Load: 1.0 Square metres / 10.8 Square feet

Wind Survival: 160KPH / 100MPH

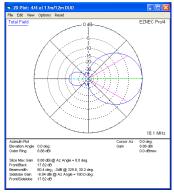
Specification

This antenna deploys elements tapering from 1 inch (25.4mm) to 1/2 inch (12.7mm) for 18MHz with elements starting at 3/4 inch (19.05mm) tapering through 3/8 inch (9.525mm) for 24MHz. 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 1.75 inch square 10SWG aluminum**.

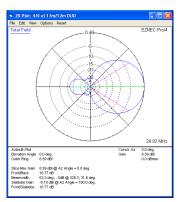
Our antennas are constructed with the best quality materials in order that the best mechanical construction can be achieved, not the cheapest and most profitable! Even a digital caliper is used to measure the elements during production to help ensure the best possible results when installed.

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 has least effect on performance and pattern degradation. More information can be found <u>here</u>

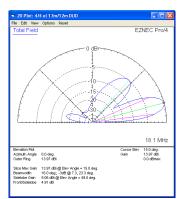
- Marine grade Stainless Steel Fittings
- Original Stauff Insulation clamps
- · Mill finished boom and elements for highest levels of accuracy



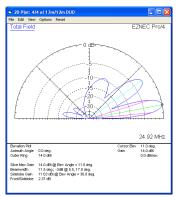
Azimuth Plot 18MHz



Azimuth Plot 24MHz



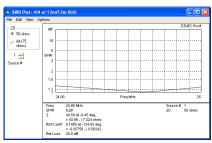
Elevation Plot 18MHz (15m above ground)



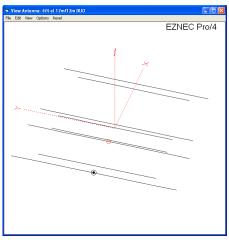
Elevation Plot 24MHz (15m above ground)

ile Edit View v	Options											ZNEC P	
-20 (* 50 ohms	INF							-			-	ZNEC P	1940
~ Alt (75	10	÷+	÷{			}							
Colorina)	5 SWR 3 1.5 1.1 180	5				req Mi	tz.						
	Freq 18.05 MHz SMR 1.06 Z 48.29 at 2.7 deg. = 48.23 + j 2.27 Ohms Refl Coeff 0.00527 at 126.55 deg. = -0.01743 + j 0.02352 Ret Loss 30.7 dB									Source#1 Z0 50 ohms			

SWR 18MHz







Antenna Layout

Manufactured the right way, not the cheapest way! ${\slashed{lmm}}$