The Best Log Periodic 21MHz to 30MHz



The Best Log Periodic Array 21MHz to 30MHz - just 4 elements Premier peformance - from The Leading LPDA Antenna Provider

Rating: Not Rated Yet Price

Ask a question about this product

Manufacturer<u>InnovAntennas</u>

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

BOLPA-4 A Super Wide Band, High Performance Log Periodic Dipole Array (LPDA) - 21MHz to 30MHz Optimised for all Ham Bands Just 5.6m long!

An HF log-periodic antenna is a broadband, directional antenna designed for highfrequency applications. It consists of multiple dipole elements of varying lengths arranged in a logarithmic pattern, allowing efficient operation over a wide range of frequencies.

• Key Features:

- Operates effectively across multiple HF bands (21 MHz to 30 MHz).
- Maintains consistent impedance over its entire frequency range.
- Provides directional gain for improved signal strength.

• Benefits:

- Ideal for amateur radio and shortwave listening.
- Reduces the need for multiple antennas for different frequencies.
- Enhances communication reliability in variable conditions.

More on the BOLPA-4 - The best 4el Log Periodic array for 21MHz to 30MHz

Covers 21MHz to 30MHz inclusive. Including MARS frequencies between 21MHz and 30MHz

All InnovAntennas LPDA's are design using the very latest computer optimisation techniques and are largely designed and built to order although examples such as this Band Optimised Log Periodic Dipole Array (BOLPA) which has had its performance highly optimised wihtin the ham bands in order performance is not characteristic of a typical LPDA.

The BOLPA-4 has just 2 elements placed within a twin-boom/dual feedline boom setup where 2 x 1.25" (32mm) square boom doubled as the feedlines and booms. The feed point is 500hm so a simple choke balun can be installed between coax cable and the antenna for an easy installation.

The BOLPA-4 provides excellent, consistent results for the frequency range it covers and the relatively limited number of elements installed upon its very short boom. For more details on this or other Log Periodic developments, contact as directly now on our sales lines or via Email sales 'at' innovantennas .com

OUTSTANDING RESULTS FROM THIS STUNNING NEW DESIGN for 2023!!

Our customers quote SWR figures not extending beyond 1.5:1 for the whole 15m, 12m, 11m and 10m bands. In addition, exceptional level of Forward Gain and Front to Back ratio (F/B) are seen due to the way in which the BOLPA-4 is designed.

WHY DOES THE BOLPA-4 WORK SO WELL?

Log Periodic Arrays are generally produced by means of a calculator rather than being band specifically optimised and therefore, performance and SWR curves vary greatly through their range and optimimum performance is hit and miss as a result. The InnovAntennas BOLPA-4 has had hundreds of hours spent optimising both SWR and Performance within the Ham Radio designated band sections which has resulted in exceptional mono-band style performance.

SDR READY ANTENNA, full 6MHz bandwidth SIMULTANEOUS PERFORMANCE!

The BOLPA-4 is whole band active at anyone time so will compliment the most sophisitcated SDR Tranceivers.

Some of the Mechanical design benefits include:

- 1. Marine grade Stainless Steel Fittings*
- 2. Integrated feed-line/boom for maximum efficiency, minimum wind-load
- 3. Mill finished for highest levels of accuracy and performance
- 4. First-of-kind 'Band Optimised' LPDAs by G0KSC



The BOLPA-4 on a 5.6m boom installed and ready to go

If you are looking for the best of the best from both a performance and mechanical construction perspective then look no further, you have come to the right place!

Performance

Gain: Better than 6.5dBi across 12m, 11m and 10m bands. 7.14dBi on 15m

Typical F/B: 20dB+

Gain at 10m (33') above ground @ 21.1MHz: 12.75dBi

SWR: 1.5:1 or better

Power Rating: 5kw+

Feed Impedance: 500hm

Boom Length: 5.63m

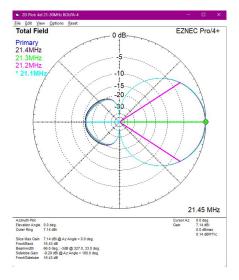
Weight: 7.5Kg

Turning Radius: 4.66m

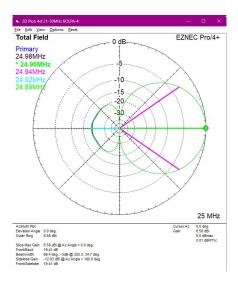
Wind Loading: 0.8 SqMtr

Wind Survival: 160KPH+ / 100MPH+

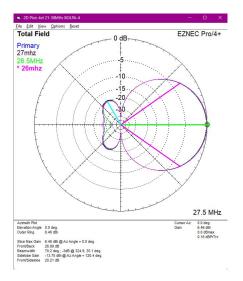
If you wish to stack several antennas, contact us for more information



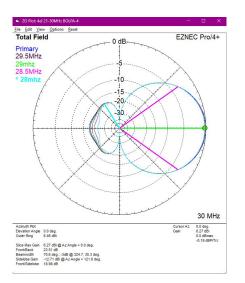
Over-lay plots on for 21.1MHz, 21.2MHz, 21.3MHz, 21.4MHz, 21.45MHz - Very consistant pattern



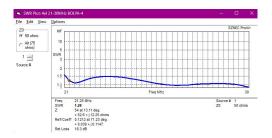
Plot overlays for 24.89MHz, 24.92MHz, 24.94MHz, 24.96MHz, 24.98MHz and 25MHz. Again, very consistant patter



Plot overlays for 26-28MHz showing exceptional results once more



Plot overlays for 28MHz to 30MHz with excellent consistancy throughout



SWR Sweep for the whole 9MHz frequency range - No ATU or matching needed anywhere

Mechanical Specification

This antenna has all elements made in 3 sections tapering from 7/8" to 1/2" to 3/8" tube.

The boom is 2 x **1.25" inch square (32mm)** which parallel as a tuned feed line between elements. centre mounted in insulated 2" clamps to a 2" (50mm) supporting mast. Other options available upon request.

If you want an antenna to last and perform in all weathers without SWR or bandwidth shifting, this is it.

Manufactured the right way, not the cheapest way!

* Where possible marine grade stainless steel components are used. https://www.jjbb.co.uk

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