The Best HF LPDA for 10MHz to 54MHz HF High Performance Log Periodic

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

The Best LPDA for HF Bands 10MHz to 54MHz The DELPA-13

A Super Wide Band, High Performance Log Periodic Dipole Array - 10MHz to 54MHz inclusive

An HF log-periodic antenna is a broadband, directional antenna designed for high-frequency 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 (3 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.

Best LPDA HF Log Periodic Performance

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 Dense Element Log Periodic Dipole Array (DELPA) are displayed and advertised in order to give an idea of our capabilities and pricing.

This antenna was specifically designed for a requirement at Broadcast Central Europe and the example photos display the DELPA-13 installed at the BCE broadcast centre.

The DELPA-13 has 11 elements placed above a 11.5m long 3’’ diameter boom of which all elements are insulated. The feed point is 200Ohm and is fitted with a 20KW 4:1 balun. Feed-line between the elements is hard-drawn copper wire which is silver plated and spaced in order to

produce a 300Ohm balanced-line feed.

The DELPA-13 provides excellent, consistent results for the frequency range it covers and the relatively limited number of elements. 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

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. **Sliver-plated balanced line feed**
4. **Mill finished for highest levels of accuracy and performance**

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!

Customer Comment:

'It performs like nothing I've ever seen. In the USA, we have some 3000 watt TV stations that broadcast FM audio on 87.75. There are 3 of them within 375 miles of me and with this antenna, I have heard them all! The gain and directivity far exceed the APS-13 that I took down. Somehow the word "amazing" doesn't do this justice.'

Performance

Typical Gain: 6dBi

Typical F/B: 15dB

Gain at 10m (33') above ground: 10dBi

Power Rating: 15kw+

Feed Impedance: 50 Ohm

Boom Length: 11.5m

Weight: 75Kg

Turning Radius: 6.3m

Wind Loading: Upon Application

Wind Survival: 160KPH / 100MPH - Higher rated versions available upon request

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

Specification

The largest eleemnts on this antenna start at the centre at 38mm (1.5") diameter and taper to 10mm (3/8"). The singal boom version uses a 76mm (3") square boom. The favoured twin-boom version has double 45mm square booms which also operate at the feedpoint.

The 10-54MHz LDPA directional antenna at K4ANP. Sadly, Len caught one of the elements and bent it during installation but SWR 1:1.4 thorughout.

The above is our favoured twin-boom version which will handle very high power input.

Manufactured the right way, not the cheapest way!

* Where possible marine grade stainless steel components are used.
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