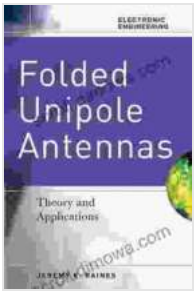
Folded Unipole Antennas: Theory and Applications - The Ultimate Guide

Folded unipole antennas are a type of antenna that is commonly used in a variety of applications, including mobile communications, broadcasting, and radar. They are characterized by their compact size and high efficiency, making them an ideal choice for use in space-constrained environments.

In this article, we will discuss the theory and applications of folded unipole antennas. We will also provide some tips on how to design and build your own folded unipole antenna.

Folded unipole antennas are constructed by folding a half-wave dipole antenna into a U-shape or inverted-V shape. This folding reduces the antenna's length without significantly affecting its performance.



Folded Unipole Antennas: Theory and Applications

by CGP Books

4.1 out of 5

Language	: English
File size	: 12739 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Word Wise	: Enabled
Print length	: 400 pages

The impedance of a folded unipole antenna is typically around 50 ohms, which makes it compatible with most standard transmission lines. The

antenna's bandwidth is also quite wide, making it suitable for use in a variety of applications.

The radiation pattern of a folded unipole antenna is omnidirectional in the horizontal plane. This means that the antenna radiates equally in all directions. The antenna's gain is typically around 2-3 dBi, which is sufficient for most applications.

Folded unipole antennas are used in a wide variety of applications, including:

When designing a folded unipole antenna, there are a number of factors to consider, including:

Here are a few tips for designing and building folded unipole antennas:

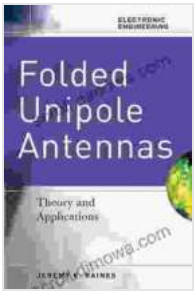
Folded unipole antennas are a versatile and efficient type of antenna. They are used in a variety of applications, including mobile communications, broadcasting, and radar. By following the tips in this article, you can design and build your own folded unipole antenna.

[1] C. Balanis, "Antenna Theory: Analysis and Design," 3rd ed., Wiley, 2005. [2] J. Kraus, "Antennas for All Applications," 3rd ed., McGraw-Hill, 2002.

Image Alt Attributes (Descriptive Long Keywords)

- A folded unipole antenna mounted on a rooftop
- A folded unipole antenna used in a mobile phone
- A folded unipole antenna used in a radar system

- A folded unipole antenna being tested in an anechoic chamber
- A folded unipole antenna being designed and simulated using computer software



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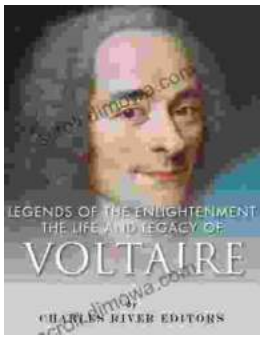

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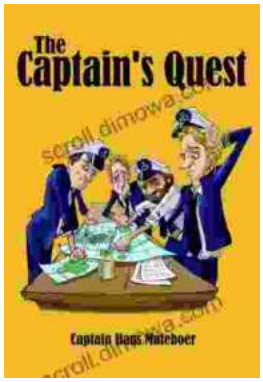

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