

عنوان مقاله:

Design, Simulation and Implementation of an Active Dual-Band Dipole Antenna Using a Series Stub

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خلاصه مقاله:

In this paper, a new method for designing an active dual-band dipole antenna is proposed. The operating frequencies of the proposed antenna are 150 and 450 MHz that are usually used in military applications. Using a series stub is the main idea in the proposed dual-band antenna, where it makes an independent resonance frequency higher than the main resonance frequency of a conventional dipole. To make appropriate impedance matching in the two frequency bands, the technique of creating an internal coaxial cable is used. Furthermore, to improve the antenna gain, an amplifier is in series part connected to the proposed dipole antenna. The simulated and measured results of the return loss, radiation patterns and antenna gain show that this antenna has a good operation in both resonance frequencies

کلمات کلیدی:

Dipole antenna, Dual-band antenna, Series stub, Military applications

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