Abstract

Combining the antenna miniaturization and bandwidth preservation could increase the challenges of integrating the smaller, thinner, low profile, high efficient antennas into equipment for different applications. In this paper, a novel Microstrip Patch Antenna with reduced size for WLAN application is proposed. Introducing in-plane Split Ring Resonators (SRRs) in the vicinity of the patch, and found that the configuration escalated the miniaturization by 42%. The simulated results showed that there was significant improvement in bandwidth. The design and performance analysis of the proposed antenna was carried out using Ansoft HFSS.
References


Index Terms

Computer Science

Wireless

Keywords

Compact  Electromagnetic Bandgap  Metamaterials  Microstrip  Miniaturization.