

ABSTRACT

This project work presents the design of microstrip patch antenna, which can be mounted on a surface. It can consist of a planar rectangular, circular, triangular or any patch of metal mounted over a larger sheet of metal called a ground plane. Microstrip patch antenna consists of a radiating patch on one side of a dielectric substrate and has the ground plane on the other side. Microstrip patch antenna can provide frequency agility, feed line flexibility, beam scanning, and omnidirectional pattern. The antenna is designed, simulated, and analyzed to improve its bandwidth. ADS (Advanced Design Systems) software is used for the design and simulation of this rectangular patch antenna and measured using a hand-held network analyzer. The simulated and measured results were compared and evaluated to get the better antenna performance in rectangular microstrip patch antenna for 5G applications.