Abstract

This paper presents analysis of Multiband Corporate fed Bowtie Antenna Array having tuned in L Band. Bandwidth performance is analyzed for different substrate materials and effect of ground plane is presented. Simulation result shows that proposed antenna using Rogers RT/Duroid material is tuned at frequencies 1.05 GHz, 1.63 GHz, 2.25 GHz and 2.92 GHz and provides 40.95%, 18.40%, 14.66% and 17.97% bandwidth respectively. Proposed antenna can be used for applications such as WCDMA, Mobile Satellite services, point to point, TV pickup and subscriber radio system (SRS). The antenna is simulated on HFSS virtual tool.

References

Bandwidth Enhancement of Corporate Fed Bowtie Antenna Array operating in L Band by Changing the Substrate Material and Ground Plane Length


Index Terms

Computer Science

Networks

Keywords

Microstrip patch antenna  substrate material  Impedance Bandwidth  HFSS bowtie antenna  corporate feed Network.