

Dual Layer Electromagnetically Coupled, Stacked Rectangular Microstrip Patch Antenna

M. A. Matin, B. S. Sharif and C. C. Tsimenidis, University of Newcastle Upon Tyne, UK

Abstract

A U-slotted rectangular patch stacked with an upper patch of different size on a separate layer is presented and the simulation results of its performance are investigated. In this case, stacking with a simple patch adds another resonance to the antenna and provides wider bandwidth. A maximum impedance bandwidth of 64.3% is achieved using this structure. The VSWR (Voltage Standing Wave Ratio) of the antenna is less than -2 between 3.4-6.8 GHz. A coaxial feed with Gaussian modulated pulse is used to simulate this antenna.