

## عنوان مقاله:

Modified Rectangular Patch Antenna Loaded With Multiple C Slots for Multiple Applications

## محل انتشار:

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## خلاصه مقاله:

A new multiple C- slotted microstrip patch antenna is proposed. A patch antenna is a wide-beam narrowband antenna. Microstrip patch antenna consist of a very thin metallic strip (patch) placed a small fraction of a wavelength above a ground plane. The patch can be designed in any possible shape and normally made by conducting material copper or gold. This paper presents design of a C- Slotted microstrip patch antenna for multiple applications. The proposed antenna has low cost, easy fabrication and good isolation. The antenna has Quad different frequency bands, centered at 1.60 GHz, 2.50 GHz, 4.70 GHz and 5.50 GHz for parameter S11. The antenna is designed, simulated and optimized for Quad band performance using IE3D software. With C - slotted shapes patch antenna is designed on a FR4 substrate of thickness 1.59 mm and relative permittivity of 4.4. The proposed patch dimension is 16\*16 mm and it utilizes microstrip line feed. By the simulated results parameter S11 and S12, shows that the antenna can cover the bands of several applications including GPS (1.2-1.6 GHz), GSM (1.8-1.9 GHz), WiMAX (2.3-5.8 GHz). Simulation results are presented in terms of Resonant Frequency, Return Loss, Voltage Standing Wave .Ratio (VSWR) and Radiation Pattern

## کلمات کلیدی:

Microstrip antenna, Slotted patch, GPS, GSM, WiMAX

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/589201>

