

A COMPACT DUAL SQUARE RING SLOTS MICROSTRIP ANTENNA FOR DUAL BAND WIRELESS APPLICATION

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ABSTRACT

This paper presents the simulation study of dual square slots ring antenna for dual band wireless application. The proposed antenna geometry excited by a single probe fed connected to the patch directly. The proposed geometry consists of two concentric, coplanar square slots ring at different position from the center of the patch. For dual frequency operation two square slots ring is etched on patch. The radiating elements of the proposed geometry of antenna operate at dual frequencies 3.8 GHz, and 10 GHz. The antenna size is very compact $16 \times 16 \times 3.12 \text{ mm}^3$, which can be easily integrated with RF circuit. The proposed antenna design is simulated and optimized using IE3D simulation software.

KEYWORDS: Dual Band, Impedance Bandwidth, Microstrip Antenna