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Dual Band Antenna Design with Compact Radiator for 2.5/5.2/5.8 Ghz Wlan Application Using Genetic Algorithm

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Abstract : This paper presents of dual-band planner antenna with a compact radiator for 2.4/5.2/5.8 proposed by optimizing its resonant frequency, Bandwidth of operation and radiation frequency using the genetic algorithm. The antenna consists L-shaped and E-shaped radiating element to generate two resonant modes for dual band operation. The above techniques have been successfully used in many applications. Dual band antenna with the compact radiator for 2.4/5.2/5.8 GHz WLAN application design and radiator size only width 8mm and a length is 11.3 mm. The antenna can we used for various application in the field of communication. Genetic algorithm will be used to design the antenna and impedance matching network.

Keywords : genetic algorithm, dual-band E, dual-band L, WLAN, compact radiator
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