

Review on Microstrip Patch Antenna for Mobile Communications and 5G Satellite

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Abstract: Human development is constantly being heavily influenced by connectivity. Human history has been shaped by it since many years, and the future is now beginning to imagine. Wireless communication has evolved over the years because it wants speed and perfection. All updates to communication generation will accelerate the electronics industry for decades. Just a few years after it was introduced, 4G has been taking over. Furthermore, there are strong advances in meeting the demand for fifth generation communications networks. This article designs and simulates microstrip patch antennas compatible with 5G communication. The antenna operates on a very high frequency spectrum (EHF) of 43.7 GHz. The substrate material used is fire-resistant 4 (FR4) poxide with a relative perpetrator of 4.4. We also examined radiation patterns, electrical distribution, reinforcement, VSWR, and loss of yield of the antenna. The results are checked to meet the requirements and are discussed for many applications.

Keywords: 5G, Microstrip Patch Antenna, Feeding Techniques, FR4, High Frequency, MIMO, Gain

